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COLLECTED PAPERS
OF
MARGARET BANCROFT
ON
Mental Subnormality
and the
Care and Training of
Mentally Subnormal Children



PHILADELPHIA
WARE BROTHERS COMPANY
1915

13434 Wed. 25

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INTRODUCTION



MARGARET BANCROFT was a pioneer in the field of education for mentally subnormal children. At the time that she began her work these children were rarely given any special training. In fact but little attention was paid even to their proper housing and care. The problem, like many of the social problems of the day, had existed for generations without attracting attention. Society had not yet awakened to its importance.

To hasten this awakening was one of Miss Bancroft's dearest aims. She understood subnormal children as few others have ever understood them; she saw their helplessness, their utter need, and she was filled with a great zeal to make the world see the problem as she saw it. She preached the gospel of freedom for subnormal children, freedom from neglect and contempt, freedom from inadequate teaching, freedom from physical defects and disabilities. This was her cause; she made herself its champion, and for this championship she will be chiefly remembered.

The following papers by Miss Bancroft have been gathered together in the belief that their publication in the form of a little book will be welcome to many. They embody all that she wrote regarding her work, and cover the period of her most active professional life, between the years 1892

and 1909. The volume seems a small one to epitomize the experience of thirty years, but an attentive reading will show that the fundamental aims of her educational work are all set forth.

The papers are reprinted without change except for the correction of a few minor and obvious errors, and such slight alterations as were needed to secure uniformity. No attempt has been made to avoid the repetitions that of necessity appear in addresses upon the same topic delivered before audiences of similar character.

The chronologic arrangement has been chosen because it enables the reader to trace the growth of some of the most important of Miss Bancroft's teachings as they developed in her own mind. For example the idea of a *personality* may be seen to unfold from vague beginnings to a definite concept; technical terms which were used freely in the earlier papers disappear later, because of an increasing antipathy to any word or phrase suggestive of disparagement or contempt; the theory of "home" environment, as distinct from institutional life, will be found to grow into a concrete plan, embracing state as well as private schools, and hospitals for the insane as well as institutions for the subnormal. Other ideas will be observed to pass through a similar evolution.


But the dominant note throughout all the addresses is the note of appeal—appeal to an unawakened and seemingly unresponsive public—for understanding, sympathy and loving help for subnormal children. That the public was not wholly unresponsive the signs of the times give abundant evidence. The importance of appropriate care and training for the mentally subnormal is being recognized by many

intelligent people. Gratifying results are to be expected in the near future; and when the history of educational progress during the present time comes to be written, the name of Margaret Bancroft will find in it an honored place.

E. A. FARRINGTON

Haddonfield, New Jersey

December, 1914



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I

TWO CASES OF INDIVIDUAL TRAINING*

THE two pupils of whom we will give brief reports to-day are not both cases of surgical interference.

The one of whom we will speak first is a deaf-mute, and so marked a case of idiocy that we feel we should like to make known what can be done for such a one with systematic individual training. In the summer of 1887 S. E. was brought to us, past twenty years of age, a sickly, wild, destructive, disgusting piece of humanity. With his eyes rolling, his head never still, his unearthly noises, his vomiting, his sniffing, and with a poor worn-out stomach, he certainly seemed not only a hopeless case, but appallingly hopeless. Neighbors asked where we kept the cow that bellowed so, the children who passed looked in trembling eagerness to see the wild man, while all our attention was given to keeping him from breaking away and destroying the furniture. The only gleam of hopefulness to us in the case was his homesickness and the strong affection he showed for his family.

During the first few months our efforts were directed to getting him physically well; indiscriminate eating and drinking had almost destroyed the coating of his stomach, consequently even after drinking he would vomit. After months of weary effort in dieting we were rewarded; and our record, twelve months after his coming to us, showed

* Read before the Association of Medical Officers of American Institutions for Idiotic and Feeble-Minded Persons, Elwyn, Pa., June 15th, 1892. See Proceedings A. M. O., 1892; p. 331.

that "S. E. went four days without vomiting or destroying his clothes." During that year we had tried male and female attendants. All left in disgust with their failure; and finally we decided that if we were to win in the race we must take entire charge day and night. This I did for three months. I slept in the same room with the boy, tended and cared for him, taught him to love me and to feel that I loved him. From that time the greatest trial was over. In the summer of 1888 Miss Cox entered into the work with me, and she noticed that he was fastidious about the color of things he wore, and suggested having nice clothing for him, white shirts, collars, neckties, etc. His people were willing, but laughed at the idea. We tried it; we took him to Philadelphia and had him fitted for his suit. The success was wonderful. He was perfectly delighted, blew and puffed on his clothes (a sign of pleasure), and from that time, unless some very serious trouble arose with his caretaker, he never destroyed anything he wore unless it was ugly. Previous to this he would destroy or tear three or four suits a week. We took him to the Philadelphia Academy of Music at one time, and he behaved beautifully and appreciated the play. We desired to have his picture taken, but so far it had been impossible; but we showed him how much we wanted him to be good, and after he had been with us two years we took him to Philadelphia to a photographer's and he had a good picture taken.

It seemed impossible to secure his attention, and after a year we had barely succeeded in getting him to string buttons and beads, and this only for a short time, his favorite pastime being to rock in a chair. In the fall of 1888 we had him sufficiently under control to place him in the schoolroom to have the discipline of sitting still during the opening exercises. Miss Cox, who had charge of him, made him draw strokes with a carpenter's pencil in a book or on a slate, and with chalk on the blackboard;

for every mark he did well he received a small piece of candy, and for every wilfully wrong mark a tap on his knuckles with a ruler. In 1889 and 1890 mat-weaving was added to the drawing of lines. It would be impossible to count the dozens of mats destroyed and the weaving needles broken and the taps on the knuckles, etc., etc., but at last patience was rewarded, and the whole school set up a hurrah one morning when S. threaded his needle and wove one row without help. There were many ups and downs, but from that time the improvement was constant until it became a matter of course for S. to finish a mat in two or three lessons. A peculiarity of his was always to choose delicate pinks, blues and grays, never showy bright colors. We had a set of stencils for him, and taking a hint from Laura Bridgman, had him print the words and get the articles; for example, cake, knife, water, cup, glass, key, etc. He was very fond of riding, and great was his glee when he could print "horse," and then take the paper to the man at the stable to show him he was to have a ride. His lessons the last year consisted of kindergarten drawing, weaving, pricking, pinking, drawing objects in Krusi's Drawing Books, Nos. 1 and 2, printing, carpentry, of which he was very fond, hammock-making, and we were about having him taught shoe-making, as he had a great aptitude for tools.

A large number of people have heard and seen this boy before and after coming to us, and all wonder at our great success. It has taken unbounded patience, hopefulness and trust, but the great secret has been love—our love for him and his love for us and trust in us. We tried two or three times placing him in the care of others to be taught, when we were engaged with a new pupil, but the experiment always failed, as none loved or thought it worth while to try as we did.

This holds good for all feeble-minded children. The only truly successful teachers and helpers in this work are

those who adopt it from love of it and not from desire for gain or fame.

The second case we have to report is one involving surgical interference, and is perhaps the most interesting of which we have any record. W. P. is reported as being an unusually bright boy until at fourteen months of age he had a fall of ten or twelve feet, after which there was a change in his mental condition, though no outward injury could be observed. At the age of two and a half years, during a slight illness, his first attack of epilepsy occurred, and from that time until Dr. W. W. Keen, of Philadelphia, operated upon him, four years later, he had over five thousand spasms. He was so dangerous that he was confined in a little room made and padded for him. His clothing had to be sewed on him every morning, as he would tear it off if it was put on in the ordinary way. Any animal or fowl which strayed into his little yard, such as a cat or chicken, etc., was instantly killed. He knocked down and kicked one of his caretakers. He could climb so quickly that his father said he had frequently been to the top of his church, and in such a position that it would make a spectator tremble with fear. It was a heart-breaking trial to his father and mother, and although everything was done to help him, and large sums were spent with different physicians, all was in vain until he was brought to Philadelphia to Dr. Keen and was operated upon at the Jefferson Hospital in December, 1889. Trephining was performed and the brain centre controlling the right hand was removed. His father stated to us, when he brought the boy to our home in March, 1890, that after the operation there was some slight improvement, that by watching him he could be kept for a time with other children without hurting them, and would not tear off his clothes as he had done before operation. His spasms had decreased in number, although he had had several setbacks, such as a bad fall, and no systematic

training. For some time after his arrival we felt we had a young tiger in our peaceful home; he bit, scratched, kicked, and spat on us until we were black and blue and dripping wet with saliva. This is no exaggeration; I have seen him wet four persons who were trying to help get him under subjection. In his paroxysms of spitting we felt that he was no imbecile, for he deliberately aimed his spitting at the person who was doing the most to conquer him. This encouraged us, and we felt we would try to find if there was a possible means of winning our way. After much hard work, and after the trial and abandonment of many methods, we finally succeeded in curing the habit of spitting.

The first attempt to have him at table resulted in the plates being thrown across the room and the table upset. He would eat nothing but meat, and that with his fingers. He seemed to have no taste at all, and in this respect we had to cultivate an appetite for all ordinary and healthful food. His right hand was partially paralyzed, and we were desirous of bringing it into action. This required the utmost patience and tact, as we were afraid to use too firm measures, on account of the danger of over-exciting him and thus bringing on the spasms, which now occurred semi-monthly. In this work we had him sit by Miss Cox, for whom he began to show the first spark of affection, and at each meal, when he could remain, she took his sick hand and had him eat one spoonful, holding the spoon in the hand; if he would do this he could eat the rest of his meal with the other hand. This was persevered with for weeks and months, and now he eats with his right hand and behaves like a little gentleman. We are very proud of his table manners.

During the first year his spasms averaged between ten and fifteen per month. We could not secure his attention, and the only amusement he had was a string, which he would blow; but in no way could he be induced to play,

or look at books, pictures, etc. The first attempt to have him in the schoolroom was a tempest; we tied him in a chair, and a strong man and myself held him there for five minutes at a time, and then removed him. We persevered in this for weeks, until we could keep him during the opening exercises, tied in his chair. After six months of this work we could have him in the schoolroom untied for a short time. It was so with everything we attempted to do with him; in teaching him we were obliged to have one person hold him while another directed his hands. So on until we gradually got him to like his work. In marching, calisthenics, games, kindergarten-work, chart-work, board-work, slate-work, there were the same battles week after week; but now he leads in the marching, and we have with us his books of work and some work which he did in a few minutes. He is trying in all his work to use his right hand, but it is a great effort and requires the exercise of patience on his part. He is loving and neat, takes great pride in his clothes, says his prayers and tries to please.

When he came he could say about thirty words, but would not repeat them with any sense. We worked a long time before we could get his mind sufficiently under control to have him talk, but now he repeats every word he hears and tries to make sentences, but is backward in this respect. This morning he made a new effort at a sentence. He saw me as he came from his bath, and said, "Good morning, mamma; see, Willie been in tub for bath." He has a daily drill in asking questions and in answering. In this, however, he is very slow, but is now commencing to ask a question occasionally, and answers a few. So far, although he has a wonderfully strong will, he has not acquired the power of bringing that will into play to practice the knowledge which he is gaining. To guide and direct him in this we feel will require the penetration and tact of a Pestalozzi or a Frœbel.

From January until June, 1891, he had fifty-three hard

spasms. From January, 1892, until the present time (June, 1892), he has had eleven, and three dizzy spells.

How we wish we could have the public see the necessity of having more teachers—bright, intelligent teachers—in this work, and of establishing training schools for teachers and attendants all over the country! When the public awakens to this necessity for the feeble-minded and backward as it has for the deaf and blind, then and only then will we see the results which can be attained.

DISCUSSION OF MISS BANCROFT'S PAPER BY DR. W. W. KEEN, PROFESSOR OF SURGERY IN THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

I am happy to say a word with reference to the cases Miss Bancroft has reported. The first one was sent to her through my efforts. I can bear witness to the most absolute beastliness of the case. It cannot be described in other terms. His habits were of the most disgusting character, far more than she would feel at liberty to state. The improvement has been marvellous. I could never have dreamed such an improvement possible, had I not witnessed it.

The second case was that of a boy whom I trephined. He had been an epileptic four years, from the time he was two years old. He had had on an average from three to six epileptic seizures a day. I had him in the hospital for some time in order to observe him with care. I was not willing to operate upon the child until I had determined absolutely whether all of the attacks did begin, as asserted by his father, in the right hand. This was certainly the case in a large number of the attacks in the hospital, and I verified the statement that there were three to six in a day. His habits were very perverse. Three times in the first examination that I made in his case he spat in my face so quickly that I was not able to protect myself,

and his father gave me the same account that Miss Bancroft has given as to his violent habits.

Having determined the fact that almost all of his attacks began in the right hand, although the history of the injury to his head was indefinite, I thought I had sufficient reason for removing the right hand-centre. It was one of the earliest operations of the kind that I made. This portion of the brain was taken out, and the history that you have heard to-day shows what an immense improvement has followed. You must remember that there are two factors in this improvement, one the educational influences to which he has been subjected, the other the surgical element in the case. At the time he was seized with epilepsy his vocabulary amounted to forty words. But he lost them gradually, word by word, till he had come down to but three words when I saw him, "papa," "mamma," and, characteristic of his perversity, the other word was "no." He has since attained a very large vocabulary. This began before he was subjected to the educational influences that have been so marked. But the point I want to call special attention to is this: While we think his mental development has been largely due to the educational methods, yet by no possibility can we conceive that the change in the epileptic attacks has been due to that. We all know epileptics who have gone from childhood to adult life with educational surroundings of the best, yet their epilepsy has remained stationary or grown worse. But in this case the attacks, instead of being three to six per diem, are now reduced, as you have heard, to only eleven within the last six months; as many as he would have had in three days before the operation. This I cannot believe to be due to his education. His mental development, I think, has been chiefly due to his education, and hence I would strongly urge that all epileptics, especially those who have submitted to operations of any kind, should be subjected to such training.

II

METHODS AND RESULTS IN THE CARE OF BACKWARD AND DEFICIENT CHILDREN*

AS I stand here to-day, for the first time confronting a large public audience, I naturally feel reluctant to present a subject which is to many, I know, not one to awaken interest. But I feel assured by the expression of your earnest faces that I shall be able to arouse your tenderest feelings and I hope, before my talk is finished, that a magnetic wave of sympathy will extend round this circle of workers, representing, as you do, our vast country—North, South, East, and West. And I trust all will have a renewed or awakened personal concern in the thousand little helpless ones who to-day require more care, more sympathy, more tact, and more scientific instruction than the blind, deaf, or any class of unfortunates, who, by some error of omission or commission against the laws of nature, have been brought into the world in an imperfect state.

Dr. Wattson tells us "as the light of the sun colors the tiniest blade of grass, so the idea in the background of the mind tinges every detail of life." It will be my object to make you feel that under every human form, no matter how repulsive in appearance or abnormal in shape, is the idea which at some time will be tinged by the light of the Heavenly Father's love. And gradually, as the sun in nature brings color to the tiniest blade of grass, the

* Read at the Second Annual Meeting of the National Congress of Mothers, Washington, D. C., May, 1898.

radiance of love will bring life and color to the idea hidden behind the unattractive surface.

First, in considering the characteristics of these backward and mentally deficient children, we must distinguish between the nervous and the mentally deficient. The nervous child is found in all our schools, both private and public, and is known by the imperfect state of nutrition shown by limbs imperfectly developed while the face frequently indicates good health. The powers of attention and concentration seem to be lacking. Although the child is frequently very bright and talkative, he is at other times quiet and reticent. The nervous child is often undeveloped in size and without symmetry of limb. Other characteristics are poor eyesight, and frequent spells of irritation, falsely attributed by unintelligent parents and teachers to temper or stubbornness. Many such children are compelled to spend later years in asylums, institutions or prisons; for in many instances the physical lack engenders and develops more deficiency.

Why do such appalling results follow so insignificant a cause? Because untrained mothers are not wise enough to take the child, when these first signs appear, to a good physician and find out the cause; secondly, because we do not force our medical institutions to make their graduating course so high as to prevent incompetent physicians from swarming the country, and through indifference or ignorance advising parents in such a manner that these children are literally neglected until the case becomes hopeless insanity, epilepsy or moral deficiency. In hundreds of cases this calamity might be averted and the child grow into a healthy man or woman and a respectable citizen. Do not make your children self-conscious, but observe carefully every sign of nervous exhaustion. Even if it involves placing him in a lower grade at school, see that the child has sufficient rest to recuperate the nerve cells, proper nutrition, good nourishing food given at regular times.

Proper clothing is another essential to these naturally weak, nervous children. Even in hot weather there should be a little wool in the underclothing. Care of health does not necessarily imply giving up mental training; but demands only physical care, watchfulness, plenty of fresh air, especially in schoolroom or bedroom, brightness and pleasant surroundings. All this should be provided in the school, since many of these children come from parents who have not the means or time or ability to observe their physical condition. If our school session could be managed in a way to give children, at the end of every hour, a period of rest and change of air, much of the nervous strain would be removed.

The age when children should have the least mental strain is the one in which, in our large cities, they have the most, viz.: the years between fourteen and nineteen. The physical and nervous strain on our girls is appalling. No wonder our institutions for feeble-minded children and insane are increasing at such a rate. A large percentage of girls are unfitted at this period by cruel work, particularly in our public schools, for ever being capable of the duties of maternity. Here we have the first cause of the truly mentally deficient child.

I shall now attempt to show you, without going into pathological detail, a few causes which will assist us in following out the subject, if you feel inclined to go deeper into the matter.

First, in referring to the congenital causes of mental deficiency, we find a further division, endemic, hereditary and parental.

Endemic cases are those due to some condition peculiar to specific localities. Take as an illustration the cretin. There is the cretinism due to locality, as that of the Alpine or Lowland. But this form of mental lack is not always due to geological conditions. It may arise from a scrofulous condition of the parent.

The disease as it exists in the Lowlands of central Europe or in the Alps, in Belgium or in Virginia, is due to locality, and is marked by the goitre and dirty straw-colored skin. But we have also the furfuraceous cretin, whose skin is milk-white and rosy, yet constantly peeling. The extremities are shortened and the truncated fingers and nose wear an unfinished aspect. The lips are cracked and the tongue deeply furrowed. Great care must be given to the skin in cold weather, as it will become chafed without the slightest cause. The mucous membrane of the eyelids and eyeballs protrudes to supply the curtailed skin at the margin of the lids. This redness of the eyes gives to the poor cretin a very repulsive appearance. Can we think of this affliction and have anything but the tenderest sympathy for the sufferer? No feeling of repulsion should be allowed to take root in the mind. We do not necessarily have bronchocele with cretinism, and bronchocele may exist without cretinism. But I would advise every mother who sees the first sign of the goitre to give special care to the physical condition of the child. Plenty of suitable exercise, food likely to build up the nervous system, systematic mental training, and the general advice of a first-class physician are all important. Mental deficiency has been traced in some cases of goitre, even where it has not been detected at once by physicians. This may later develop into insanity or some other form of mental trouble, which, if the case be attended to early in life, may be averted.

Of the hereditary causes, at which we next glance, I may surprise you by saying I have less fear than of the parental. Of course you all know of families where insanity, feeble-mindedness, scrofula, tuberculosis, etc., have existed to such a degree as to be marked. Such cases occur most frequently where there have been intermarriages. But in almost all cases of inherited tendencies, we firmly believe, if parents were well versed in the laws of nature, and watched the child from birth, such conditions could be

avoided. The inherited weakness may be there, but will require an exciting cause to develop it. And if the proper measures can be brought to bear to avert that cause, should we not utilize them? I cannot see why a child should necessarily inherit disease from former generations, but I believe it depends largely upon the ability of the mother and father to combat that inheritance. However, what may be done in the future has not been done in the past, and we have bad results from impure blood in our forefathers.

Resulting from this cause we have the microcephalic type (the smallhead). This feature is not always the sign of a weak brain, but in many cases it is accompanied by poorly developed brain tissue and sometimes by intracranial pressure. This brain pressure produces an almost helpless case of mental deficiency. No two cases of this kind seem to be alike, and although science in later years has developed skilled surgery to bring relief, we have not found any case which has been permanently helped. We think if such cases could be known at birth and during infancy a systematic manipulation be given the head, together with salt-baths and certain physical movements, much could be done and perhaps the patient cured. Such care is not given for the reason that parents are loath to acknowledge any such deficiency until it is too late to do much, and physicians have not as yet given this form such study as we hope they will in the future. We have noticed in cases of epileptics that a certain rubbing of the head and gentle movements will at times bring relief. Of course rubbing could scarcely influence the closure of the cranial sutures, but in infancy I believe the skull might be expanded if treatment were commenced at once, and continued scientifically for the first three years. We have noticed that children afflicted with this trouble have been the offspring of families where eczema or tuberculosis has prevailed.

Under the hereditary caption we note also hydrocephalus or dropsy of the brain, frequently caused by scrofula

or tumors pressing upon the brain, and often developed before the child is born.

To parental causes of weakness of intellect the majority of cases must be assigned. In our fifteen years of experience, so far as I can judge, the parents are for the most part responsible, and in many cases, I am sorry to say, the trouble can be traced to the mother. It is very easy to place our shortcomings on our grandparents, but I believe with the parents lies the responsibility. Improper conduct before marriage, overwork or lack of care during pregnancy, cause helpless little ones to enter the world in anything but a normal state. Dr. Seguin attributes this result largely to the lives of unhealthy excitement which young girls lead at the period when they should be built up physically, mentally, and morally, by proper food and study and away from such excitement. How else can they become fitted for the duties of maternity? Our public schools may do more harm in this respect than society. Much insistence is placed nowadays on the physical development of women; but is this not frequently attended by excitement? Almost all women to-day live in too much of a whirl. It is hard to find the golden mean between an exclusive home life and a society life often full of excitement. When mothers, teachers, and guardians shall find this *via media*, so that our girls become strong, healthy, well-poised women—then, and then only, can we expect to see babies coming like fresh flowers, perfect from the hands of the Maker. You will naturally ask whether the fathers have nothing to do in the matter. Men are what we make them. They will be as good and pure as we expect. If woman-kind advances to a higher plane of morality, breaking down all false pretences, men are bound to reach the same goal.

Development may also be arrested by traumatic conditions existing before birth or afterwards due to carelessness of nurses. Sometimes a protracted confinement is the

cause, or the improper use of instruments at birth. Whooping cough, measles, diphtheria, and other infantile diseases, sometimes produce brain trouble unless proper care be exercised. These and other conditions productive of brain disease might be averted if young women could enter the marriage state perfectly equipped, determined to know and do all that will aid them to bring into the world healthy, bright children.

With such reflections upon the causes of mental weakness, it is natural to ask what is being done for the improvement and comfort of these, the least of God's little ones. Whatever the cause of trouble, we find the child is not responsible and should therefore awaken not only our pity, but our tenderest sympathy. Although the mother and the father may neglect their duty to the child, our tender, loving Heavenly Father gives to these little ones an extra gift, as it were, of spirituality and tenderness. They illustrate as no other children the text, "of such is the kingdom of Heaven." Their faith, trust, and love are beautiful, and mutely demand for them the same rights, and greater rights, than any other class of afflicted children. Sadly enough, however, they are often the last to receive attention.

Although we have large institutions for the care of the poorer classes, they do not provide home life, the individual study and watchfulness which alone can give to the public the greatest obtainable results based upon scientific training. The condition of these children is no more degrading than that of children with weak hearts, weak lungs, defective hearing or poor eyesight. I once heard it said that it were well to wish them all dead. If that wish were fulfilled, how many of you to-day would have any children alive? How many parents have normal children? These little ones are peculiarly endowed with the spiritual life, and with all due respect to the new psychology, we have been able by our close contact with them to see that their abnormality is not primarily of the mind, but of the body. The broken

or imperfect mirror cannot clearly reflect, the defective instrument cannot give utterance to tone.

Only when epilepsy, hysteria or some cruel nerve pressure produces a highly nervous state, do we find anything hurtful or unkind in these children. Remove the pressure, give physical relief, and at once we have again cheerful, sunny, tractable children.

How best to reach the mere germ of mentality lying dormant in these poor little bodies, how "the sun may get to the blades," has been the thought and care of such good and great men as Guggenbuhl, Seguin, Brown and Kerlin. They have felt that this is to be accomplished only by the closest contact and a firm and loving discipline, such as our large institutions cannot possibly provide. In many of the handsome buildings bearing the name of "State Schools," it is a deplorable fact that only a small percentage of the inmates attend classes. The others, it is contended, do better at domestic or farm work. But if it is necessary to put the mentally deficient to manual work at such an early age, would not the same principle apply to the blind and the deaf? The excuse rests upon the insufficient means to furnish a proper number of teachers for the great number of children in the institutions. With sufficient appropriations it would be possible to grade the pupils and so report mental progress. No one teacher can do justice to twenty feeble-minded children. Twenty pupils, all nervous, restless from physical causes, each taking mentality from the teacher, leave her little power to inspire or instruct. Exhausted by the effort to keep proper discipline, in giving out the day's task in a merely mechanical way she is doing more than well. To help these children, it is necessary to search and search for the first sign of mentality, by object, talk, or loving care, line upon line, until the next step is reached. How necessary then is it for the teacher to be fresh and young and of strong mental resources, if she is to arouse any dormant faculty in the pupil. European

institutions are ahead of us in grasping and emphasizing this limitation of number. The best schools there do not allow more than eight or ten pupils to a teacher, and in number work (on which they lay great stress) only four pupils in a class. When our public shall be aroused to demand this condition in our state schools it will be possible to ascertain what can be done. Another requisite is a state law for the castration of all males positively proved to be mentally incapable, before the age of puberty, in order to prevent subsequent suffering and sin.

I would suggest that our schools be so arranged for a small number of pupils, not exceeding one hundred, and that this hundred be divided into groups or families of twenty. In making this division those helpful to each other should be selected for each family. A schoolhouse entirely separate from the homes should be provided for class purposes. And the classes should be graded according to the advancement of the children. The children would then at fixed times meet in the same way and with the same incentives as normal children. Proximity to a good city or town is desirable to insure the interest and oversight of the public. One of the worst calamities for the insane or the feeble-minded is to be isolated. A non-resident physician brings from the outside an impetus of fresh forces into the lives of the patients and preserves his own interest by avoiding the influence of daily contact with the pupils. A resident physician should be maintained only for cases where it is impossible to get an outside physician. The insane too would be wonderfully helped by this arrangement. As a thinking public we should endeavor to provide that all children mentally deficient should be sent early to some school or institution, because in early years the impressions are more easily made and work will be more telling.

With great pleasure I comply with the request that I give some account of our work in Haddonfield. After years

of uphill work, we have now what we feel is an almost ideal school. As yet we have neither a little school building separate from our main building, nor have we a sea-shore cottage for periodical changes; but we hope to have both in the near future. Although our school does not exceed eighteen pupils, our entire family numbers forty-three. Our teachers, as far as possible, are trained for their particular branches of work. For the physical care of the little ones outside of school, we have bright, cheerful, ladylike attendants. In our domestic service we endeavor to have dress and appearance neat and attractive, so that the eye will as far as possible see nothing discordant. For their physical upbuilding good food properly prepared is served at tables and in a dining-room tastefully arranged. Ourselves, teachers and attendants, eat with the children, in order to see and know all pertaining to the welfare of those entrusted to our care.

We endeavor to surround them with everything that is beautiful, everything that will appeal to the artistic sense. Both in winter and in summer our home is decorated with flowers and growing plants. We extend this theory to pictures and pretty objects in the bedrooms and appeal for pretty and tasteful clothing. The "lily" work on Solomon's Temple was but the symbol of the "lily" work in all that the Creator has made. More "lily" work in the life of all, whether poor or wealthy, means a nearer approach to the ideal life.

Strictly speaking our mental work commences with the thought "that all outward expression of mental states and mental action is by visible movements and results of movements." Working upon this hypothesis, we first train our children in physical and manual work. In application of the thought "that stimulation is necessary to movement as well as supply of blood to the nerve centres," we have a regular system of brain training, commencing in the morning with singing lessons in which we use the Cheve sight

method, appealing alike to sight and sound, the common stimuli. Afterwards gymnasium, articulation, and kindergarten classes, based upon scientific principles, arouse and stimulate latent mentality.

In the gymnasium we do solid, earnest work with the thought "that a muscle duly supplied with good blood, if stimulated to action will grow; the nerve centres of the brain which stimulate the muscles are affected at the same time and tend to act on future occasions with more exactness and more quickly when stimulated by the same word of command." Our object is to drill the nerve centres or different portions of the brain, increasing thereby the quickness and precision of their action; therefore we leave the brain as far as possible to command, and avoid drills with dumb-bells, wands, and Indian clubs, preferring to gain attention and perfect time of movement rather than strong muscular action. For entertainment and amusement, however, we have drills. Merely mechanical work is avoided in the daily exercise of different groups of muscles. The system which best secures these results is the Swedish. After a careful study of the different systems of physical culture and the use of some for various purposes, we find that for good gymnastic work and stimulation of the brain cells, nothing equals the Swedish, both passive and active. Aside from the half-hour in the gymnasium given to each class, individual practice is provided for special physical trouble. Dancing, thoroughly taught, is also an important feature of our work.

After the work in the gymnasium the children change from class to class for articulation and special nature work, in winter drawing lessons from plants in the greenhouse, and in summer in the woods and gardens. Living objects, birds, chickens, rabbits, horses, ponies, and donkeys furnish topics for lessons, and for indoor work a number of good class objects are provided. In the advanced class not only are talks given but drawings are made by the children and

the lessons take the form of a written exercise. In every lesson we endeavor to draw from the children the brain thought, or at any rate by means of pictures to create a mental image. Objects, plays, and other means are resorted to until it seems that the mental impression is made. Applying this method to articulation we have found it successful when no other seemed to avail.

Reading and number work are all based on objects; but in every case the object lesson is not left until a thorough knowledge is acquired and the child knows how to apply the lesson. Each class is given a daily lesson in sight work on numbers and words placed on the board and erased.

In articulation we combine the Pollard and Ward systems, but frequently use methods of our own suggested by experience.

The teachers are required to report any signs of nervous exhaustion during the daily lessons. And when it is indicated by naughtiness or irritability, the child is told that he or she is not well and is sent away for an hour's quiet rest, or for a walk or ride in the fresh air. We always try to avoid the word bad, and as a rule we have no naughty children. We have children whose hands are restless and whose feet are too tired to walk just right, and sometimes children whose tongues are very sick and say naughty words. But rest or change of work is needed to correct these conditions. In the case of older children who have not had such training, great care is required, but with little children we find this method works like a charm.

Of manual work I think I may say we have the best system of the kind in the country. It includes work in wood and clay, wood-carving, free-hand drawing, painting, and Indian basket work, and, of course, daily lessons in sewing. Our wood work is a combination of the Russian and Swedish system of Sloyd. The youngest child is taught to handle tools, and as soon as a straight line can be made by saw and carving tool, the child makes his first

object, a key-rack, calendar holder, thermometer or blotter. In clay work the same method is adopted until the child is sufficiently trained to model from nature. In painting and free-hand drawing the same course is pursued. The same leaf which is copied in wood-carving serves as a model for clay work and is drawn and painted. The Indian basket work too is helpful in developing the fine touch required for selecting, weaving and bending the splints. Of the advanced class a knowledge of the different kinds of woods, their various names and their uses, is required.

The outcome of this kind of training can hardly be estimated or described. Take a single instance. A little girl, entered in September almost three years ago, had no command of figures, was restless, lacking all power of attention and concentration, and was in many ways very deficient. It was almost four months before her fingers could trace a 2 from dot to dot. To teach her to handle pencil or chalk seemed a hopeless task. To-day she can write one hundred words from dictation, or any number from 1 to 50, can read fairly well, and in all other work has improved in proportion. A boy who has been with us less than two years, who knew nothing when he came, has made still more rapid improvement in the gymnasium and also in manual work.

The causes, characteristics and treatment, general and particular, of mental deficiency, have thus been set in due array. But our task would be incomplete, the time ill spent, were it not possible to bring out some central thought, to find some salient point on which, as on a peg, the whole argument may hang. The causes we are unable to eradicate. The characteristics though varied are familiar. It is in the method of treatment that the main interest must lie. And here the first word and the last, the secret of everything, is *thoroughness*. If, as we know, slipshod instruction and study are deleterious to the normal pupil, how much more to the mentally deficient! Accuracy in

the minutest detail, logical processes of thought, a faithful conscientiousness far removed from any perfunctory instruction, are essentials without which the work would be better undone. No class of pupils requires so much the sincere, earnest teacher as these children. Such an instructor will ever bear in mind the words of the greatest Teacher: "For inasmuch as ye have done it unto the least of these, ye have done it unto Me."

III

HINTS ON THE CARE *and* TRAINING OF MENTALLY *and* MORALLY DEFICIENT CHILDREN*

IN these closing years of this great century of humanitarian schemes and projects, an ever increasing interest is manifest in the "what to do" and the "how to do it" for those who are mentally, morally or physically deficient, and even the mite that I shall add to the general collection may assist in helping on a hitherto much neglected but a transcendently noble and important work—the training of weaker humanity. It is our hope that a few facts impressively presented from time to time may spur on these thinking men and women of the National Educational Association to lend their powerful aid to the great task of developing a system of training that shall meet the peculiar needs of a class of children whose clouded minds and joyless lives should appeal strongly to all on whom Providence has bestowed well-balanced mental faculties.

Before entering upon the details of the training best suited to the mentally deficient, two important points may be considered, viz., the size and character of the state schools which should be established; and the desirability of abandoning the use of the terms, "idiot" and "imbecile," and the substitution of words which will not imply a slighting disrespect.

* Read at the Meeting of the National Educational Association, Washington, D. C., July, 1898, at the time of the first discussion of Mentally Deficient Children by the Department of Special Education of the Association. See Proceedings of N. E. A., 1898, p. 1040.

The number of pupils and the subjects and methods of instruction in such schools are vitally important questions. "Science," says one of our great thinkers, "is organized common sense." Can any intelligent human being believe that there is "organized common sense" in bringing together under the roof of a single institution, hundreds of human beings afflicted physically to a degree that causes mental deficiency? Think of it, you who are students of physiology, and predict the results! Think of it, you who are students of psychology, and calculate the loss of mentality to those who if surrounded by the proper environment might gradually approach toward a normal development. Think of it, you who are earnest students of biology, is this the way you would treat a pet specimen which you wish to preserve, and of which you desire to note the growth?

The thoughtful mind cannot fail to see that little is as yet generally known of what may be done for mentally deficient children. Requiring, as they do, more tact, more personal care and more scientific teaching than either the deaf or the blind, they yet receive less than any other class of defectives, and we appeal to-day for justice and for that alone.

In 1850, in the United States, the mentally deficient numbered 9,830; in 1890 the number was 97,097; and it is probable that in the last eight years the number has increased more rapidly. Dr. Fernald estimates one mentally deficient person for every 500 people in the United States. In the present year (1898) there were twenty-four state schools with 8,492 inmates. Think of this and compare with it the number of institutions for the blind and deaf. Is it anything like a *pro rata* provision? Since writing the paper which was read in Washington in May last, there have come to our notice two very touching appeals on behalf of children who, it appears, cannot be admitted to any state institution.

In one case the boy has been refused several times on the plea of lack of room; yet in that very institution any one who is willing to pay a good sum annually can secure admission for a child. Should there not be a state law forbidding any admission to the state institutions excepting where it is proved under oath that the parents are unable to defray expenses? Such a measure would discourage needless pauperism and thus reserve the state schools for those who have real need of them—those who are unable to have suitable care at home. It is not our idea to exclude pay patients from the state schools, but there certainly should be no discrimination against those who cannot afford to pay for care. Rather should these be admitted in preference to those who are able to provide private tuition.

Schools should be established throughout the different states, with a capacity for a number not exceeding one hundred, and should be arranged on the cottage plan; each cottage having a family of twenty-five, graded according to the mental status. There should be placed in each family of higher grade two pupils of lower grade, so that those of lower grade may get the mental benefit of contact with those of the higher class. This would also give the matron the opportunity of seeing what help and care are required by those of the lower grade. The assembling together of a low grade is very detrimental, as many of these children, perhaps from some physical disfigurement, appear more deficient than they really are, and these can be profitably placed under observation with a higher class.

This increase in the number of schools at first appears to involve very large expenditure; but if the perquisites and other minor items which go more or less with large appropriations, were deducted, and if the work were taken out of the hands of politicians, the state would not be at a much greater expense than is necessary for one large institution; and the advantage which would accrue from the practical and scientific management of this class, which to-day is

increasing so rapidly, would fully compensate for any additional outlay. In each of these small state homes there should be a school-house equipped as thoroughly as for normal children. All appliances needed for object teaching should be at hand. Physical culture and manual work departments should be fitted with the best apparatus and tools. There should be not less than six good teachers for this number, each thoroughly qualified in her special branch. Nature work should be well taught; and for the older class a laboratory is advantageous. In other words, the work should be conducted with the same thoroughness as if it were expected that some day these children might be fitted to enter college.

With this kind of instruction, maintained by able teachers under these favorable conditions, the coming century would witness a marvelous improvement mentally in this class of unfortunates.

The physical care of the pupils should be given to none but first-class practitioners. No resident physician can acquire sufficient experience to do all that can be done for the mentally deficient or insane. No one but a physician from the outside, coming in daily contact with different diseases in the clinics of the hospitals, can be qualified to care for these who are afflicted in a thousand different ways. Such a physician would bring new thought, new impetus and new interests, which would result in maintaining the best possible medical and surgical health standard in the school.

Physicians of any reputable system should be permitted to treat such cases, since conditions which practitioners of one school might fail to benefit might be successfully met by another. With earnest hand-to-hand work, physicians of the several schools of medicine in each state institution would be equal to all emergencies, as each physician would see that his special charges were properly managed both in regard to training and physical care. Much

in the way of careless nursing and management would be remedied if this plan were carried out.

It would be well also for this Association to urge the passage of a state law providing that every mentally deficient boy (whose mental deficiency is positively certified by three competent physicians) be castrated before the age of puberty. Such a procedure, regulated by law, would be a humane measure to prevent the perpetuation of mental deficiency, and it would also be a great advantage to the boy himself, who has not sufficient intelligence to control that which is or may become a pernicious and dangerous habit.

The training of all children, especially those whose mentality is deficient, should be based upon the scientific dictum that all "outward expression of mental states and mental actions is by visible movements and results of movements." Working upon this basic principle, the children should be trained in physical and mental work, thus utilizing the physiological fact that systematic stimulation is as necessary for development as is a supply of food for the healthy functional operation of the nerve centres. Sight and sound are the more common stimuli to movement, and a methodical brain training founded upon this principle, and accompanied by the appropriate exercises, in rotation, of all of the brain cells responding to the senses, will produce good results. The extent of the improvement will depend of course not only upon the excellence of the teaching but also upon the degree of deficiency, the cause and the structural defect in the individual case.

In conducting physical culture, the work should be done on the principle that a muscle duly supplied with good blood, if stimulated to action, will grow. The nerve centres which stimulate the muscles are affected at the same time, and tend, on future occasions, to act with more exactness and promptitude when stimulated by the same word of command. The object should be to drill different portions of the brain, increasing thereby the quickness and precision

of action. To increase brain development we work on these general lines ; but for simple amusement we may intersperse drills with music, and make use of Indian clubs, dumb-bells, etc. Such drills are not intended for brain development. Each day the different groups of muscles should be exercised. The so-called Swedish system is best suited for this purpose. Other systems are also good, and parts of these may be incorporated into a general system by intelligent instructors. In other words, a thorough teacher in the physical training of the backward child should be well versed in all of the practical systems, and should be competent to adapt them to the individual demands of her charges. The ball and many German games are very helpful in the training of the senses. For children with backward or peculiar gait the Emerson system is beneficial. Some children are unable to do any active work, and for a time will require passive movements, with perhaps some special apparatus adapted to their particular physical needs. The results in correcting curvature and badly shaped limbs have, in our experience, been most marked in using the passive Swedish work.

To obtain the best results almost everything depends on the selection of teachers with strong and adaptive individuality, who are able and sufficiently interested to become for the time the mind, so to speak, of the pupils under their tuition, thus stimulating mentality by a sort of magnetic influence. Girls possessing this natural gift, with a good common school education, make the best teachers. It should also be remembered that this work incurs a mental strain far greater than in ordinary teaching, and the continual "giving out" exhausts the mind, unless the teacher daily engages in different occupations to restore her equilibrium. At the teachers' meetings, this should be well impressed on the instructors, so that they may know of this condition and understand the necessity for regular mental change. If this course is pursued the teacher will

not break down, but on the contrary will become brighter and more efficient each year. As the work demands so much in the way of mental resource, a successful teacher is compelled to "grow into" it in a manner not required in the training of normal children. Strong, thoughtful studies are those which should be pursued by those desiring to obtain the maximum of success as instructors of these children.

The second important matter in connection with this class of children is the absolute and universal abandonment of names which are neither accurate nor dignified—the terms idiot or imbecile. When these obnoxious words are banished we may expect that more interest will be manifested, both by the laity and by those who have the professional care of this class. Dr. Ireland tells us that the terms are not descriptive, and furthermore that it is difficult to frame a terminology comprehensive enough to include all the meanings in which they have been used. We agree with Dr. Ireland, and feel that until less objectionable terms can be found to apply in such cases, the phrase "mental deficiency" is not only free from the stigma of reproach, but is properly descriptive of the condition. This Association is doing and has done much to broaden all mental work, and it is my earnest desire that you will in the future insist on this change of name in justice to these children who cannot speak for themselves. If this can be accomplished you will do a very great kindness to these least of God's little ones.

There has been a request that I present some thought on the matter of those more nearly normal children who are yet unable to cope with the normal child, on account of some physical disability; and that I offer also some suggestions on the management of the morally deficient. It is difficult to convince the Board of Education that these children who can not keep pace with those who are normal, should be provided with special classes or schools. These

are urgently needed because the consciousness of being less apt than their brighter classmates naturally impedes, in this weaker class, the development of the intellect, which under more favorable circumstances might grow rapidly. The schools for these children should be entirely separate, but every care should be exercised so as not to make the children attending them feel any consciousness of inferiority. This will be a most delicate difficulty to overcome. Children are so prone to make remarks (hearing as they do matters discussed by their parents) and the little ones attending special schools will be made to feel their backwardness, unless each Board and each teacher shall control the matter in a very judicious way. It is impossible suitably to place these children in a separate class in the same school with pupils possessed of the normal capacity for learning. They can be cared for to best advantage only in separate schools, which schools must not by any implication be conspicuous as schools for dull children; but on the contrary they must be made schools with such environment that the children may feel every incentive to advance.

It is not necessary to speak here of the great need of proper and thorough medical examination in our schools. Miss Keen's paper on that subject in May, was so thorough and comprehensive that it fully covered this most important subject. Every one engaged in educational work knows the necessity for good medical direction, and knows also how much trouble, as well as expense, can be saved to the public if all children who are physically disabled be placed in time under proper medical treatment.

These schools should provide physical and manual training, and the mental work should go harmoniously hand in hand with these two branches. The fear at present with those who are giving this matter thoughtful attention, is the encroachment of the manual work and physical training on the mental. This would indeed be a grave error, but one that can be easily avoided. These schools

require the best teachers, those able to note the effect, psychical as well as physical, of the different kinds of work; whether, for instance, certain movements in the physical training induce or stimulate certain mental results; and also the mental effect of certain kinds of manual work. The ideal teachers for this work must possess native, inborn tact, as well as a good working knowledge of psychology and physiology. No second-rate teacher should ever be placed in charge of such children. You, as an Association, must strenuously insist on this. You have already done much good work, and now Philadelphia and other large cities require your further influence in this line.

The next problem has been thus far unsolved. What is the best training for the morally deficient? Speaking from experience we are of the opinion that the ordinary school is not the place for these children. A little training is worse than none. Give a baby sharp tools, without any knowledge of these tools excepting the fact that he can do certain things with them, and the result is disastrous. Give morally deficient children a little general knowledge, and you have simply handed them the tools to do far greater mischief than would be possible if they had remained in utter ignorance.

The places for training the morally deficient must be small home schools, where the children can remain under the most judicious training from earliest childhood until past twenty-one. The studies must be of the best kind, developing the mind of the pupil so thoroughly that these immoral tendencies would be brought under control. I know of a case in point, that of a child who was unquestionably deficient morally. She told falsehoods, she stole, and in many other ways showed the most cunning and treacherous tendencies. The child had an abnormally bright mind, and in the course of years she was thoroughly trained, receiving a college education. In her case, although these evil tendencies are still occasionally manifest, the woman,

by this exceptional training, has been made aware of the necessity for keeping constant guard against temptation. Her cultivated intellect has given her control over these strong evil tendencies. This is the one way in which such children can be reached. But how get the public to realize this? Houses of refuge, and other so-called reformatories, are not the proper places for such children.

Suitable homes, then, should be under the care of expert psychologists, and the best physicians should be in daily attendance to note the individual results and decide as to whether there should be separation of those more deficient than others.

If certain children cannot be reached in this way, then they must be placed in permanent homes; they are no more fit to be at large than are the incurable mentally deficient or the insane. The morally deficient child or adult holds sufficient influence to do a great deal more harm than the insane or mentally deficient. All know what they must expect from the latter, but the moral lack is so completely hidden beneath an apparently correct exterior that people are deceived in nearly every instance, and incalculable evil results because of the absence of restraint on the conduct and action of these moral weaklings.

The increase in moral deficiency is about *pro rata* with that in mental deficiency, and this is because the public, in its general lack of interest, has felt that no special provision need be made for this class. The reverse is the case, and the ultimate satisfactory solution will be reached, step by step, only by patient, earnest, thorough work, based upon the surest foundation of truth. The *best* must be given in school work and pretty homes. This, to many, sounds absurd, but when you count the expense these people are to the State afterwards, the ounce of prevention will evidently be better than the pound of cure. It will be well to reflect for a moment on the cost to the State of each theft committed, each murder perpetrated.

In conclusion, permit me to say that in settling this difficult problem there should be no hesitation about unsex-
ing both the male and the female where it has been proved
beyond doubt that the moral deficiency is beyond help, ex-
cepting that the sufferer is to be made comfortable, as in
the case of the incurably insane or the mentally deficient.
If we meet the question wisely and heroically, with organ-
ized common sense, it will not be long before a practical
solution of the moral question will be reached.

IV

THE

CLAIMS OF THE FEEBLE-MINDED*

THE memorable events of the passing week, the crowded sessions, the learned papers and discussions, all these have shown rapid strides in educational purpose and technique; and, as applied to the vast army of normal children, would seemingly show that the race is always to the swift and the victory to the strong. But in the quiet of this gathering at the fag-end of this great convention we surely must not lose sight of the paramount claims on our attention and sympathy of the less richly endowed little ones who in this age of progress toward perfection have too often received but little share of the advantages so freely accorded to their more fortunate brothers and sisters.

The first step in satisfying the claims of mentally deficient children is to see that training schools are established in every state, and day schools, with facilities for the special training of backward children, in every city. Some may ask: "Cannot these children be trained in their own homes or with other children?" I answer, "No;" for the conditions in which such boys and girls are placed are such as to make suitable training an impossibility. In dealing with such children every cause and effect should be carefully studied by the skilled practitioner and the student in psychic phenomena, in order to remove, if possible, the

* Abstract of the Vice-Presidential Address, read at the meeting of the National Educational Association, Charleston, S. C., July 13th, 1900. See Proceedings of the N. E. A., 1900, p. 674.

bodily obstruction, whatever it may be, which impairs or prevents the normal working of the mind.

Backward and mentally deficient children need specially trained teachers, and also a human environment adapted to their peculiar needs. They must be under the care and influence of those who can comprehend with sympathetic intelligence their peculiar phases of mind—phases at once complicated, delicate, and sensitive in the extreme. Therefore to place them in the care of teachers not specially trained, or in classes with normal children, is a procedure as unintelligent as it is unkind. We must surround them with the persons, the objects, and the scenery which will develop their limited powers as fully as such favorable conditions alone can make possible. This can be done only by providing state and private schools in which the selection of teachers, of methods, and of appliances shall be made with intelligent reference to the special needs of such children.

Let me say one word in regard to the proper teachers for these children. Knowledge of psychology gives an insight into the work which will be highly beneficial, and we do not speak disparagingly of it; but given two teachers, otherwise well qualified, that one will be the more successful who is possessed of a motherly instinct and a sympathetic nature. Should you add to essential characteristics a suitable practical training and a working knowledge of psychology, you have the perfect teacher for mentally deficient children. Take away the sympathetic nature and the mother-love, and substitute merely the cool, calculating, scientifically trained teacher, and place such a teacher over these children, and you will have no satisfactory results. We want common-sense brought to bear in this matter. Therefore I would urge the establishment of training classes for teachers for mentally deficient children. These classes should be attached to good schools for such children, where teachers in training would get a practical knowledge by

daily experience. In this way efficiency would be secured, the teacher getting at the same time a practical and a psychological training.

In view of these considerations may I be permitted to urge that a representative from our work be placed upon your committee, which at present represents secondary schools and high schools, but which has at present no members representing the interests of the blind, the deaf, or the mentally deficient? We need the mentality which may accrue from this union, and you need the practical knowledge which we shall be able to bring to your meetings. There is every reason to feel that such a representation would result in benefit to all concerned. We urge the appointment of a delegate from schools for mentally deficient children and one representing the interests of backward children; and that the papers and discussions in these meetings be reported and printed in our magazine; thus giving to the teachers in our institutions the benefit of your advanced knowledge.

I desire to call attention to the needs of the southern states and to express the hope that this Association will use its influence to secure the establishment of state schools of this kind in the South. We have on an average one mentally deficient child to every five hundred in the population, and practically no provision in the South for their training. I also call the attention of the public to our private schools for neurotic children. I see no reason why these schools, which are doing good work in this line, should not receive endowments as do our colleges and universities.

In the well-conducted private school where individual work is done in the class a better knowledge can be obtained as to real results than in any other way. If these private schools should receive from time to time small endowments, they would be enabled to pursue a course of scientific work which would be impossible in our larger

institutions. One of these schools, with an average attendance of less than twenty-five children, spends annually, in caring for and training them, \$23,000. With such an expense as this you can readily see that the school could not afford the additional cost of extra scientific experiments. I have no doubt that other private schools could send a similar report, and that they all desire to invite inquiry and inspection. For my own part I would urge that the private schools should be open to state inspection.

Like Cato, who always finished every speech with the words, "Carthage must be destroyed," I shall always, in pleading for the mentally deficient child, strongly urge that such children be unsexed. For this there are two reasons: first, that there should be no possibility for such children to propagate their kind; secondly, for humane reasons. This idea, given out two years ago, received thoughtful consideration and resulted in good. I hope that the next two years will see some state, if not states, sufficiently advanced in civilization and humanity to pass a law requiring the unsexing of all those unfitted to propagate their kind. This law should apply to all cases of pronounced mental, physical, and moral deficiency. In this way the action of the state will radically remove a great part of the underlying cause of degeneracy.

For the same end, the thoughtful and highly enlightened members of this great educational Association, as they return to their respective fields of labor, must use their influence in making the teachers in our schools see to it that students under their care, from kindergarten to college, should be taught the laws governing physical and moral development, so clearly, so positively, that each boy and girl, as body and mind advance to maturity, may see it to be their sacred obligation to prepare themselves to perpetuate physical and mental soundness. This will do away with impurity of thought and action.

Since I last spoke before this Association I have been

more than gratified to find that the terms "idiot" and "imbecile" are gradually being dropped; "mentally deficient" and "backward" are the words substituted. Chicago employs the term "neurotic," which, thus far, is the best name for the class of children in which we are interested. In the work we are called to do as educators we find that all our pupils, even those regarded as normal, are more or less deficient in some mental or physical feature or endowment; and I wish that, as applied to the class of pupils in which our department of the Association is especially interested, the term "defective" might be dropped. Unless you make a division which will place all who are not absolutely perfect, physically, mentally, and morally, on the "defective" list, you have no right to make any division. We therefore respectfully request that, in the future, this department be known as the department for the blind, the deaf, and the neurotic.

The new theory of evolution puts forth the idea that the fittest are responsible for the rest. Shall not we, who, we trust, are fittest, feel our sacred responsibility in having entrusted to our care these weaker little ones who have come into this great world imperfectly fitted to carry life's heavy burden? The normal child can, to a great extent, manage his own education; and yet it would seem that almost all our educational thinking looks to the care and developing of the mentally sound and capable. While recognizing the importance and the wisdom of giving our best efforts in good measure to the training of the large body of our youth who are mentally strong, I would most earnestly solicit for the less fortunate a measure of thought and effort commensurate with their urgent needs.

V

CLASSIFICATION OF THE MENTALLY DEFICIENT*

IT is related of Pythagoras by Cicero, that once upon a time Pythagoras came to Philius, a city of Peloponnesus, and while there he displayed in a conversation which he had with Leon, who then governed that city, a range of knowledge so extensive that the prince, admiring his eloquence and ability, inquired to what art he had principally devoted himself. Pythagoras answered that he professed no art, and was simply a philosopher. Leon, struck by the name, again inquired who were the philosophers, and in what they differed from other men. Pythagoras replied that human life seemed to resemble the great fair, held on occasion of those solemn games which all Greece met to celebrate. For some, exercised in athletic contests, resorted hither in quest of glory and the crown of victory; while a greater number, attracted by the love of gain, flocked thither in order to buy and sell. There were a few, however—and they were distinguished by their liberality and intelligence—who came from no motive of glory or gain, but simply to look about them, and to take note of what was done and in what manner. “So likewise,” continued Pythagoras, “we men all make our entrance into this life on our departure from another. Some are here occupied in the pursuit of honors, others in the search of riches; a few, who are indifferent to all else, are they whom I call students of wisdom, for such is the meaning of ‘philosopher’.”

* Read at the National Conference of Charities and Correction, Washington, May 14th, 1901. See Proceedings of the N. C. C. and C., 1901, p. 191.

This anecdote seems peculiarly appropriate to this body of workers, men and women interested in the highest development of the race. With this end in view it is necessary that you inform yourselves on the absolute and relative utility of all branches of knowledge in order to apply where needed that which will bring the best results to mankind. No doubt great discouragements meet you each year and problems face you which seem appalling; but we always find that the sciences which are studied with the keenest interest are those which are in a state of uncertainty and unfolding. Finished certainty and absolute completion would be the paralysis of any study. What is true of science is true indeed of all human activity.

In life, as the great Pascal observes, we always believe that we are seeking repose, while in reality all that we seek is agitation. Under the same conviction Plato defines man as "the hunter of truth."

"Our hopes, like towering falcons, aim
At objects on an airy height,
But all the pleasure of the game
Is afar off to view the flight."

"The intellect," says Aristotle, "is perfected not by knowledge but by activity." The arts and sciences are powers, but every power exists only for the sake of action. You are obtaining a knowledge of human powers and human progress by your activity, your earnestness to meet and overcome the evils of life.

The talk assigned to me would perforce compel me to delve deeply into the mind in its normal and abnormal windings. We use the term mind when we really mean physical conditions which favor defect or annul certain mental conditions. We cannot rationally define the abnormal until we are quite familiar with the normal, and deduce from this standard the conditions which produce the abnormal.

I cannot better express the meaning of normal than

by quoting the scholarly definition of Dr. W. R. Newbold. "*Normal properly means conformable to type, or conformable to the standard. The type is properly determined by the average of instances, and has no direct reference to the end subserved. We may thus regard a given scrap of stone, or a case of typhoid fever, as normal, i. e., as types of their kind, without any covert teleological reference. But, when in any given class conduciveness to a given end is a relatively constant feature, it necessarily becomes imbedded in the type concept, and the latter becomes teleological. When the end subserved is generally advantageous, a tendency manifests itself to enforce upon individuals conformity to the type; and the latter thus assumes, to the consciousness of the community, the form of a standard to which one ought to conform. Supernormal and subnormal denote the notion of degree, which is not found in abnormal, pathological or morbid. A man may be supernormal either by possessing all the normal faculties in extraordinary degree, or by possessing new faculties not found in the normal man. Thus this word has chief reference to normal in its first sense of average or ordinary. But if the new faculties or the unusual development of normal faculties were distinctly injurious to their possessor or to the race we would scarcely term them supernormal. Thus the word, like normal, denotes two meanings, above the average, and more in conformity with the ideal. So, of subnormal, the primary meaning is below the average, but it also refers to the ideal as a standard; e. g., we would scarcely designate a child who is notably deficient in temper as subnormal or as abnormal unless that deficiency amounted to a defect, i. e., tended to the child's detriment.*"

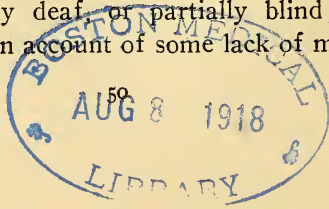
The types of deficiency of which I am to speak stand not merely for shortcomings as compared with the average child, but for defects as compared with the standard; and by standard in this case we mean that particular combination

of physical and mental powers which will best conduce to happiness and length of life under the conditions actually known to us.

It is as difficult to classify the variations of the abnormal mind as it is to differentiate the extravagancies of the normal. We can only generalize roughly. To classify we must arrange according to resemblances and differences (or variations). Every class should be so constituted as to contain objects exactly resembling each other in certain definite qualities which are stated in the definition of the class. This we cannot really do with the abnormal, for the differences, even in the individual cases we place under the same general head, are often marked. In our endeavor to make a systematic arrangement we feel like the celebrated Turgot, who said, "the first thing is to invent a system and the second thing is to be disgusted with it." In trying to differentiate the various types of mental deficiency and marshal them in order, I have been discouraged by the difficulties in the way, and very much dissatisfied with the attempts which have been made from time to time and which have become classic in the medical text books. In order to render a clear non-technical idea of the abnormal classes as they have come under our observation, I shall present to you the views of a layman and not the technical subdivisions of the medical specialist.

In our work, we have first, those that are backward by reason of some sensory or motor deficiency; second, the mentally weak; third, the mentally deficient; fourth, the morally weak, and as an aggravated form of the same, the morally deficient.

In the first division we include all who by reason of some sensory defect are unable to compete with the so-called normal child. In them there is almost invariably a physical defect apparent to the physician or teacher, the deaf, blind, partially deaf, or partially blind; also those who are backward on account of some lack of motor control



which is recognizable by the eye. For this class of children (and they are more numerous than ordinarily imagined) we need special schools and special training, in connection with the public school system, and where this is given, in many instances, we find the children after the first few years of this individual training (which should include physical and manual work with the mental), frequently able to take their place with normal children. Many after a time develop into bright men and women. A large percentage of our criminal classes to-day were among the backward children of a generation or two ago, and because the educational facilities were not of the kind to develop the best in them, these children drifted into being truants and afterwards swelled the number of inmates in houses of correction, criminal courts, etc. We need to-day, in every state and every city, special schools for these backward children that they may not so drift into crime. Our institutions should not have such children. As far as possible we should have day schools and small homes with not over twenty children in each home, the children daily attending public schools. This provision would include a number of other children who are now boarded out by children's aid societies. These children, who require the most delicate insight and most careful watchfulness, are more frequently boarded in families where the mother has not even an intelligent idea of bringing up her own offspring. There is a false sentimentality about this matter. Children who come into the world handicapped with sensory or motor defects or marked with the stigma of illegitimacy need above all others the environment and intellectual surroundings of cultured women. This could be done by the state's providing small homes and placing at the head of such homes ladies capable of acting as house mothers. We have many women eminently fitted to fill such positions. With this environment, and public schools specially adapted to the training of backward children, there would soon be a

wonderful advance in the acquiring of true wisdom by the youthful population now swarming our large cities. In any case, where a child is so physically incapacitated as to be unfitted to propagate his or her kind, such a child should be unsexed in order to preserve the purity and healthy condition of humanity. This serves the two-fold purpose of preventing the lowering of the race and also of preserving such a child from untold suffering in the future.

Under the next division, the mentally weak, we have a more complicated state of affairs. Here the defect is not visible to the unskilled eye. The child seemingly has all senses developed, can walk, talk, etc., yet all his faculties are in such an undeveloped state as to retard the growth of the mind. This may be due to the lack of development of the cells of the brain or the partial destruction (by disease or accident) of the nerve fibres, the projection fibres, or to lack of co-ordination, or to disease or general weakness of the nerve tracts of the cerebro-spinal axis.

These children need the care and training of good schools, and should as early as possible be separated from normal children; for the normal children only retard their advancement. The skilled neurologist, who has made a special study of such cases, should be consulted, rather than the family physician. The trained eye of the specialist will more readily note the defect and more rationally direct the remedy; for this is his work, a work which requires the most painstaking study. The child needs physical care, and medical gymnastics; teaching him, one should begin with whatever engages his interest rather than with the topics which logically introduce the subject. He needs also the watchful eye of those accustomed to note the physical weakness, as he needs change of occupation at times. Such children will frequently develop to an advanced stage; in fact, I have yet to see a mentally weak child who has entirely ceased to develop. We have with us a girl who is almost forty, and to-day she readily takes up new work

and will persevere until she has accomplished what she has started out to do. We have been able in our individual work to refute the theory that after a certain time the mind of the mentally weak ceases to grow. So far, in our seventeen years of experience, we have yet to find any child remaining at a given point or going backward. Of course they have every possible care, and therefore a judgment to the contrary, based upon experience in large institutions where it is impossible to give this careful, watchful attention, is fallacious. We may find such cases, but as yet they have not come to our notice.

Passing from the mentally weak, we come to the mentally deficient. With these we find the way dark and the work discouraging at first; but frequently that which seems a mere bundle of flesh and bones will, with loving care and beautiful environment, awaken to a degree of intelligence which is astonishing.

Dr. Ireland has suggested a classification of the mentally deficient which seems to me the best I have seen. His division is as follows: Genetous, microcephalic, hydrocephalic, eclamptic, epileptic, paralytic, traumatic, inflammatory, sclerotic, syphilitic, cretinic. I will briefly refer to some of the characteristics.

In genetous deficiency the diseased condition is complete before birth and the presumption of heredity is stronger than in other forms. Very frequently the youngest child of a large family is found deficient from such causes. The children of this type are seldom well built, but are short of stature, and long retain an infantile expression. Under this type we have what is called the Mongolian form of deficiency. In all these cases the patients are apt to show tuberculous tendencies.

The microcephalic patient presents a deficiency due to lack of development of the hemispheres. Some believe that microcephaly is an instance of atavism, the appearance of a type of brain inherited from some very remote ancestral

type. A great discussion has resulted from the examination of the microcephalic brain. It has been contended that, although the brain is diminished, it shows so distinctly traits known only to the human brain that in no case could it be taken for that of a lower animal. The brain of a microcephalic patient may be diminished in size and deformed, but the characteristics belonging to mankind are so marked that the microcephalic, no matter how low he may be, is not a beast, but a diminished man. Microcephaly precedes birth. Vogt, a disciple of Darwin, thought the characteristics of the microcephalic patient resembled those of the anthropoid ape. But the intelligence of the monkey is very different from that of such a patient. The mental powers of the monkey are in perfect accord with his organism. His agility in climbing and swinging himself from branch to branch is perfectly marvelous. The microcephalic patients have no power of feeding and protecting themselves, and no fondness for climbing. They possess the partially effaced lineaments of human beings which only a wandering fancy would mistake for those of an ape.*

Hydrocephalus is the most fatal of the nervous diseases of children. Many children die of this so-called "water on the brain;" some recover without having their minds impaired, a few neither die nor recover—these furnish examples of our lowest grades of deficiency. Sometimes it comes before birth and often after birth. Epilepsy frequently accompanies hydrocephalus. The children of this type are apt to be gentle and easily managed.†

We have convulsions which are not strictly epileptic; they are termed eclampsic, but the training and skill of the neurologist are needed to differentiate the two. The surroundings of the epileptic, his diet and occupation, have much to do with his mental condition. We have as yet very little knowledge of the disease, because it seems

* See W. W. Ireland: *Mental Affections of Children*; London, 1898; pp. 96, 97.

† Ibid. p. 133 *et seq.*

impossible to secure the proper surroundings and training. It is not well to train him with the children who are not subject to the disease, and yet he should not be placed where he is shut up entirely with his own kind. The colonies for epileptics, I think, are the worst things we can institute for the obliteration of the disease. If mind affects mind, certainly to colonize many epileptics will of necessity retard rather than promote the possibility of help; in other words, it will increase the disease. When we have small state schools and sort out our children, placing one epileptic with ten who are not, we will do more to help the epileptic than all the colonization will ever do.

One other division is cretinism, to which I wish to call your attention. This occurs frequently; and many who know nothing of this form of deficiency are interested because of familiarity with the title. It is endemic in the Alps, and has been common there since ancient times; it is most common in shut-in valleys and has a close connection with goitre. Nowhere does cretinism exist where goitre is not found, but goitre may occur without cretinism. There are close valleys where more than half of the children are cretins. Parents living in these valleys will frequently send their children to elevations to be nursed, and this tends to a change for the better. A great improvement has been made in many cases of sporadic cretinism, by the medical use of preparations made from the thyroid gland of animals. This treatment must be watched and the effects closely noted by the physician.

This concludes the present-day classification of the mentally deficient, and I want you especially to note that those odious terms "imbecile" and "idiot" have not been used at all, though I have touched all forms of mental deficiency. We have no use for those names of implied contempt, and if we wish to elevate these weaklings, we must avoid terms by which we express their deficiency. There is much in a name and the way the name is used. They may

be called mentally deficient, but many types of deficiency occur.

I cannot leave the mentally deficient without first speaking to you of the beautiful characteristics of these children—for they are children, although sometimes old in years. After seventeen years of close contact and hand-to-hand work with them, from the lowest grades to the highest, I have as yet to find a viciously inclined child or one who could not be helped upward, provided the right environment was brought to bear, and the keynote to the psychic life was found. We read in the reports of physicians and in books of their viciousness, of their cruel traits; this is not true and gives to the public a false idea of their true characteristics. I will admit that under a wrong influence and with those who have not the tenderness to bring forth the good traits, perhaps dormant, the mentally deficient child will turn on his attendant and fight for his rights; but this will not be done until after he has been imposed upon for some time.

They appeal to the most tender side of our natures, shut in, knowing (as I am sure many of them do) far more than they can express, and yet unable to make their wants known; unable to tell if they have been unkindly treated and imposed upon or neglected; these beautiful souls inclosed in poor sickly bodies at times lose control and attack those who fail to understand them or who ill-treat them. Give the mentally deficient the proper care, kindness and love, and excepting in some rare types of epilepsy he will not hurt or harm any one. The training must be judicious, and great but kindly firmness must be brought to bear. I am not speaking from a sentimental standpoint, but from a purely practical and humanitarian point of view.

To speak of putting these children out of the world is to my mind as unjust and wicked as to wish your next-door neighbor dead if he does not come up to your idea of physical greatness. We all have our physical weaknesses,

and we never know when those weaknesses will incapacitate us, making us useless members of society.

One thing it is necessary for us to learn, namely, how to prevent children from coming into the world with defective bodies. This can be done by bringing before the public the right way of living and by instilling into them a knowledge of the physiology and psychology of child-bearing. Further than this, we should enforce the unsexing of all who are unfitted to propagate their kind; but when defective offspring once are here, the obligation to care for them rests upon us with far greater weight than the obligation to care for the normal child.

We will glance at the morally weak and the morally deficient. The general public must grasp the truth that moral sense, like every other mental capacity, requires a fitting basis of brain structure, and that if this has never existed or has been destroyed by disease, a moral sense is impossible. You will all admit that there are those who have no ear for music, none of the special structures of ear and brain through which alone an appreciation of music is possible, and that those persons can never develop such a capacity, every rudiment of it being absent. Again, we have those who have this structure, but it is like the mind of the mentally weak, an impaired structure, just as there are those who have a certain ear for tone without having it sufficiently developed to produce music excepting by the most careful and painstaking study. But with this study such people may become fairly good musicians. This is the difference between the morally weak and the morally deficient—one can be helped, but for the other we do not feel that any plan has as yet been developed which will make a permanent impression. Many mistakes are made by confusing the morally weak with the morally deficient; and by placing the weak with those who have a tendency to increase this weakness, no improvement is made, and the weak thus drift into hopeless deficiency. Many such with

proper environment and early training might grow to be good men and women. I think there is one salvation for the morally weak. For the morally deficient as yet we have not found any permanent help. In the first place, parents and physicians should come to the realization that this condition is a disease, and as early as possible the matter should be brought plainly to the parents' notice. Then the environment should all tend to strengthen the weak points and obliterate the evil. I contend that this can be done by true psychological training. This training should commence in the earliest years of the child. Teachers should be trained for this work, and schools should be established with this end in view. These children should be trained with the view of receiving a technical education. The physical development should be well looked to, the manual, and finally the scientific training should follow. Where the brain powers are brought to bear upon the recognition of differences and work in the scientific laboratory is such as to bring into play the power of concentration, the brain structure is bound gradually to change. The trouble has been that we give these children "edged tools" and only just sufficient education to sharpen their already bright and cunning wits.

Furthermore we should not place them all together, but one morally weak child should be placed with ten strong, and so with the morally deficient. The morally weak will not retard the strong, but the strong will uphold the weak. I believe if this course of treatment could be tried systematically for the next fifteen years, in twenty years the decrease in crime would be incalculably great. It would be expensive at first, but not nearly so much so as the crimes which are committed by these morally weak and morally deficient at the present time.

In Plato's Republic there is this quotation which is truly applicable to this gathering: "I have told you only half, citizens; we shall say to them in our tale, you are

brothers, yet God has framed you differently. Some of you have the power to command, and in the composition of those he has mingled gold, wherefore they have the greatest honor; others he has made of silver, to be auxiliaries; others again are to be husbandmen, and craftsmen he has composed of brass and iron; and the species will generally be preserved to the children. But as all are of the same original stock, a golden parent will sometimes have a silver son, or a silver parent a golden son. And God proclaims as the first principle to the rules and all else that there is nothing which they are to be such guardians of as of the purity of the race."

While the bulk of this essay comes from personal experience and observation, I am indebted to the writings of Drs. Ireland, Baldwin, Newbold, McKim and others for the information and help I have obtained from their books. In some instances, where their words have expressed the thoughts better than I could word them, I have quoted from them entire.

VI

LIGHT THROUGH BROKEN WINDOWS*

EXPERIENCE is the only road to truth. Leonardo da Vinci calls experience "The Mother of Sciences." It is by the vast accumulation of individual experience that mankind grew out of primitive savagery to his state of modern culture.

It will be the object of the present essay to present some views that are the outgrowth of some twenty years of experimental work with mentally deficient children; especially some ideas relating to the "light" or hidden life behind human organisms. I will therefore take as the basis of my thought that the psychic "light," life and personality are one, no matter what you may call it.

In the lowest forms of life (such as the *ameba*), the beginnings of all physiological processes are found; for example, irritability, contractility, nutrition and reproduction.

In the growth of the *ameba* we find the first efforts, as it were, when life pushes its way into the sense-world by means of a physical manifestation. The human organism, the highest of all, makes precisely the same efforts. In it the *ego*—the personality—or the individuality—endeavors to work its way into and become manifest in the world of sense by means of the nervous system, just as in the *ameba* we find the manifestations of intelligence in the cell-substance, which has no nervous system.

Therefore, I am with those who believe that which we commonly call "the mind" is the soul-light working through

* Published in the Journal of Psycho-Asthenics, December, 1904.

and utilizing the bodily organs of sense. In a normal person the motor and sensory nervous systems act as the windows of the individual personality.

As yet, I have not been able to collate completely these elements of experience into a scientific philosophy. Therefore, the orthodox scientists may think my views unfounded. Notwithstanding this possible criticism, I firmly believe that the time is near at hand when we shall be able to furnish substantial evidence that will prove not only the existence of a personality, but of an *ego* that lives and feels, even though its full expression may be obscured by an absence, or a disease, of certain portions of the physical structure, and that this personality probably persists after all apparent physical conditions have disappeared.

The trend of thought in this direction will also become apparent by a careful study of many of our recent works on biology and psychology.

If you read carefully any of these works, or parts of all, you can get an idea of both sides of the question as to the existence of life with or without the physical attributes.

The broken, many-stained and pictorial windows through which the light is struggling under disadvantages to harmonize itself with the physical world at large are found in three classes of persons—the mentally deficient, the morally deficient, and the insane. In these, the light is there, but the images, as in a broken cathedral window, are more or less shattered and confused.

It is not easy to define clearly what is meant by mental deficiency. I have ventured one definition which seems at least to avoid some of the difficulties. Mental deficiency is the lack of some part (greater or less) of the central or peripheral nervous systems, or the incompetency of these parts to respond to the efforts of self-expression. When this lack is so pronounced that there is little or no acquaintance with the world of sense, we have the very lowest

form of mental "lack," frequently accompanied by some great disfigurement of the body. Persons so afflicted are called monstrosities.

In the second grade we have children mentally deficient from gross brain alteration and not capable of marked advancement by reason of absence or serious defect in the greater portion of the cerebral hemispheres. Here the pathological conditions are such as to be almost irremediable; and the net result of treatment may be merely the modification of some established habits.

In the third grade are children who are capable of greater intellectual advancement than those of class two; where the destruction or defect is limited to certain functioning areas of the brain or of one hemisphere, such as the auditory, visual or motor centres. With these there is less obliteration of latent or actual mentality, and more can be accomplished by training.

In the fourth grade we have defectives from conditions extra-cerebral or reflex, or where there is delayed cerebral development either as a whole or in part, without the brain being actually the seat of gross lesion. These are frequently capable of marked intellectual advancement. In this grade, deficiencies may have been caused by epilepsy, prenatal malnutrition, inherited diseases, or traumatism.

This is the classification I would suggest, because the usual methods of symptomatizing are arbitrary and the terms employed undesirable, so that it seems impossible to classify these cases except on pathological grounds. The class basis must, however, always yield to the individual in care and treatment.

Another grouping of these types is as follows: Hydrocephalic, microcephalic, paralytic, traumatic, sensorial, meningitic, myxedematous, amaurotic and mentally deficient "*savants*." Pardon the introduction of these technical terms, but this classification is used in many of our institutions and asylums.

Hydrocephalic, microcephalic, paralytic, epileptic, and traumatic are very readily recognized by their symptoms. Sensorial deficiency is a form due to the congenital or infantile loss of some of the senses; for instance, in the cases of Helen Keller and Laura Bridgman, sight and hearing. Meningitic can rarely be diagnosticated until after death. Cretinism I described in an earlier paper. Amaurotic is rare.

The term "mentally deficient *savants*" is applied to certain children who exhibit special aptitudes of one kind or another that are out of proportion to their intellectual development in other directions, and often remarkable as compared with similar accomplishments or faculties in normal children.*

This will give you an idea of the different kinds of our broken windows and the manner in which the complete normal mental picture is obscured. But how are mothers and teachers to determine when these windows are broken? If possible, start at the very earliest age, and notice what is apparent in the normal child, then use this as a basis for comparison.

In the first month of life, a normal child will discriminate sound; its perceptions will be active as to taste, smell, touch, sight and hearing. It should sleep sixteen hours out of the twenty-four, and its reflexes should be active. A six months' old child should be able to raise itself to a sitting posture, crawl with pleasure, look into the mirror and seem as if it were comparing the image with the original. At twelve or fourteen months of age the child should stand without support, stamp, begin to whisper consonants *b, p, y, d, m, n, r, l, g* and *k*, and especially use the vowel *a*. At the ages of seventeen, eighteen and nineteen months the child commences to associate words with objects and movements. It blows a horn, combs and brushes hair, and makes other imitative movements. When two years of age, it marks with a pencil on paper, pretends to

* See Popular Science Monthly, December, 1896.

use a newspaper, executes orders with surprising accuracy, beats time and tries to dance to music.

Now, if you will compare the abnormal with the normal, you will very readily see where the deficiencies are. However slight they may be, the first thing to do is to set to work to remedy them. The ways to do this are many and the time too short for me to go into details in this paper, since each child requires individual attention. If, however, I can be of any help, I shall be glad to answer questions, either in writing or by interview; but inquirers should always remember that a full outline of the case will have to be given before a course of training can be decided upon.

In our own school we have individual training in class work; each child has individual physical culture and individual discipline. Yet, all of these children are grouped in different classes in order to stimulate them by emulation and competition. This ideal course can be carried out only in a school where there are many teachers for a few children. However, in your own homes you could start something like it, if you have the time and patience to devote to it.

I come now to the morally deficient group. Personally, I have not yet been able to estimate properly the exact lack in the nervous system that causes moral deficiency, but I believe the time is near when we shall be able to diagnose such cases correctly and determine the portions that are lacking or diseased, and then we shall be able to apply the remedies much more intelligently than is possible to-day.

I have always held the theory that if we could take a morally deficient child in its earliest age and give it a special education up to the age of twenty-four, carrying it through even the higher grades of education, always with the one end in view, to eliminate particular failings, we should soon be able to do away with moral deficiency. We should train the child especially to be painstakingly exact. Let me illustrate by a hypothetical case. A certain girl or

boy is untruthful and unwilling to carry out any work given her or him. Put the child to work, then, to measure exactly three inches square, and make a square exactly three inches, join the ends, and persist in the exercise until it is done correctly.

The important thing is to be persistent. Never cease until the set task is performed, and performed properly, even if you have to show the child how to do it a thousand times. The ultimate results are worth the labor. If this perseverance is carried out in all work, I think you will soon have the "open sesame" to the abolishment of moral deficiency.

When perhaps after years you have gained a complete control over your child's habits, give him a college and then a university training in the sciences, especially in zoölogy and botany, and those branches which require microscopic investigations.

This training, accompanied by proper medical gymnastics, is, I believe, the only true help for this class of children.

This may seem an expensive project to you. It is really work which our Government might well undertake. Certainly, the millions of dollars that are now spent upon prisons and reformatories could be better used in support of our universities.

I have been very much interested in the insane, and it has been my privilege in the last year to have the opportunity of observing some of this class. I would define insanity not as the *lack* of certain portions of the brain, or a weakness of the central nervous system, but as a disease of these parts after the *ego* or personality has become normally in touch with the world of sense. When such disease has occurred, the *ego* or personality has been repressed, and in its endeavor to reach out comes through wrong channels. Therefore, we have those "storms" which are known as acute mania.

These storms in a nervous person or one mildly insane remind me of a river that has overflowed its channels and is endeavoring to find a course without knowing just where to go. Just as we have to find a new channel for the river, so we must find a new outlet for the personalities of the insane.

In many instances our neurologists, by discovering the physical causes, have been able to do this. Even though we cannot find these, we may still be able to discover other neural parts duplicated, that have not been in use, by which this personality may secure its outlet without causing the storms which are apt to occur when it is forced into an irritating path.

Even if the insane cannot always be cured under this treatment, I maintain that seventy-five per cent. can be made tractable. No matter how beautiful our state asylums may be, work of this kind cannot be done in the mass. It must be done with small numbers and by trained neurologists, aided by helpers with intelligent scientific insight, preferably women.

Can you imagine anything more pathetic, and commanding more fully our truest and deepest sympathy, than a personality unable to express itself and yet capable of understanding the outside world? No matter how maimed the body, and how lacking in mental aptitude, perhaps there is a very beautiful personality striving to emerge into the world of sense, which, with proper machinery for exit, might make the patient blossom into a man or a woman of letters and renown.

VII

HOME CARE OF CHILDREN WHO ARE BACKWARD AND MEN- TALLY DEFICIENT*

INTRODUCTION

THE object of this paper is to present to the parent, guardian or teacher, a general outline of what a "Home Course" of training for the mentally deficient child should include. Only the general principles can here be given, for it is obvious to any one that in dealing with children such as we are considering, a special course must be devised adapted to each child. No two are deficient in the same way; no two, therefore, can be managed in the same way. In every case the history of the child should be known to those undertaking the training; and still more important, an examination of his physical and mental condition should be made by skilled specialists before any system of training is formulated. On an intelligent diagnosis of the individual deficiency must be based the selection of every remedial agency. Some apparently serious deficiencies are comparatively easy to correct, being dependent upon an imperfection in some organ or function of the body, which, when ascertained by the specialist in his examination, readily yields to proper medical or surgical treatment. A common cause, for instance, of apparent mental dullness is defective vision, and the services of an oculist are needed before anything else is to be done. It is obvious, therefore, that to arrange a course of effective treatment and home management for a particular case, we

* Published in pamphlet form, February 18th, 1905.

must have the history of the child, including a skilled diagnosis. This paper merely presents some general observations which may be serviceable in most cases, but can by no means fully meet the requirements of the individual. Special detailed directions suited to the particular case should be formulated to supplement this general outline. I trust that those interested in the training of children of the class under consideration will see the necessity of having the child examined by a skilled neurologist. Only in that way can individual needs be met.

FORMATION OF CORRECT HABITS

(a) *Daily Physical Habits*

One of our great psychologists has said that "man is simply a bundle of habits;" regulate these habits, and the person becomes in a certain sense an intelligent machine running smoothly and almost automatically. Hence, in dealing with the normal child, the first aim of an intelligent parent is to form in that child certain habits so confirmed as to be a guiding force in daily life—as some would say, "second nature."

The man or woman who is able to do the greatest amount of work in the world is the man or woman whose alert intelligence has enabled him or her to form the largest number of effective and well-regulated habits. Therefore, the first object of the teacher or trainer of a mentally deficient child (who, of course, cannot act on his own initiative) would be to establish as soon as possible certain desirable and necessary habits. The nervous system, however impaired it may be in individual cases, can be trained at least to degrees of usefulness, the results in many cases being surprisingly satisfactory. The child with weak nerve centres, and with probably certain areas of the brain injured or gone, will of necessity require most thoroughgoing study and specialized work on the part of the expert, whose business it will be to find some nerve centre that

will, by proxy, do the work of those that have, because of defectiveness, refused to act; or to train weak nerves into strength and efficiency.

In dealing generally with mentally deficient children, the first aim should be to establish a regular time for the daily evacuations. This is of the utmost importance; it is imperative that some intelligent and trustworthy person should attend to this matter. A nurse girl of the right kind can be trained to attend to the child at a regular time each morning. If there is no movement, a good warm water enema should be given. If this is persisted in day after day the child will, unless the case is unimprovable or hopeless, form a regular habit of evacuation. If the child is not able to do this, there need be no fear of the enema. We have used this method of treatment for years with the most delicate children, and with marked success.

In the case of epileptics, it is sometimes advantageous to give what is called a high enema or cascade, even if there has been an apparently good evacuation. We have a child on record, fourteen years of age, who, before he came to us, defied all medical treatment of both schools and the most watchful care of his mother. He was never able to retain discharges or to evacuate at the right time, even when the best attention was given by his attendants. When he entered our school we originated a method to suit the case, and it has proved most satisfactory in results. At a regular time every morning we give this boy a good hot water enema. This gives the lower intestinal tract just what it needs—a washing out, a bath. He has gone as long as six months without trouble, and his general health has improved wonderfully. No special attention to his diet is needed; he eats as other children do, and with good digestion. We defined his case this way: the boy had not cerebral power to control the necessary muscles, and a natural action in his case resulted in only a partial evacuation. Later, when the boy went out to play, there was

an involuntary evacuation which frightened and distressed him, and this constantly recurring shock to his nerves affected his whole physical health. The enema reaches up and washes out the colon, and although the boy has not yet reached a stage where he can dispense with the enema, his organs of excretion have formed a habit just as any other habit is formed, and waste matter is ready to pass off at the proper signal. In other words, although in this case we have thus far been unable to establish a habit of mind, we have overcome the unpleasant situation by establishing a habit of body through the artificial means—the enema.

An epileptic child has had a similar history. When she came to us she averaged two thousand convulsions a year. By using, in the way just described, the hot water enema we were able to take her through a whole year without a spasm. After being with us a number of years, she left our school and was placed in a large institution, and although bromide and other drugs are given to prevent convulsions, she sometimes has as many as fifty a day. As might be expected, she has retrograded in every way.

I am firmly convinced of the vital importance of thus forming daily physical habits, and of the possibility of doing so in the vast majority of cases, if intelligent and persevering study is given in the individual instance as it comes before us.

(b) Destructive Tendencies

Most children who have weak nerves are inclined to be destructive. The first thing to get out of our minds in connection with this matter is the thought that the child does this because it is bad; such a child is seldom wilfully destructive. He breaks and destroys for the simple reason that he lacks motor control; the nerves are irritated, and there is an impulse to do something. Not having the proper inhibitory power, he is apt to destroy whatever is

in reach. The idea of total or even partial depravity has so little to do with these cases, if it has anything, that, for all practical purposes in this discussion, it may be ignored.

The usual plan of removing the objects out of his reach is useless as a means of cure, except in rare instances. The methods employed vary, and depend upon the mental and moral constitution of the child. In our own school we do not apply the same method to any two children. Yet I think I can safely say that it would be hard to find less destructiveness in a family of normal children as large as ours.

On general principles, I would wish to surround the children with everything they desire to destroy, and so satiate them with the amusement they crave that the habit would die a natural death; but this disturbing and somewhat expensive way of exorcising the evil spirit is rarely necessary. There are better and more economical methods. For instance, we have a little boy who has been with us a year. When he came, if he saw a flower, vase or book, his impulse was to throw away the flower, dash over the vase and tear the book. He is now in a room that is as sweet and pretty as can be, and he destroys very little in that room. He has been trained to handle flowers and to look at books and vases, not to toss or break or tear. He does this, except on very rare occasions, under the direction and control of an attendant or teacher who uses his hand as she would her own if she were handling the article. Then he is taught to bring the article to his attendant or teacher. If he does this without tearing it, he gets a piece of candy, so that gradually he gets an idea of associating something pleasant with the occasions when he sees these things, but does not destroy them. The process is, of course, slow; but, being founded on a rational knowledge of the condition, is sure.

With other children we use different methods. A little girl would in certain nervous paroxysms, break tumblers

at meal time. For a few meals she was put at a table where she had to use a tin cup until "her hands got well." When they were perfectly well, so that they would not hurt her tumbler, she was allowed to come back again and use her tumbler. The method of treatment proved speedily efficacious; hand and tumbler were soon restored to their former friendly relations. I think I can truthfully say that for our twenty-five children we might have twenty-five different methods.

We base the beginnings of our training on the reports of parents or guardians; and it is modified as, by careful daily observation and study, we come to understand the cause of the destructive tendency. This search for the cause and for the remedy to meet it is our daily study, and a most interesting study it is, putting us in the attitude of friend and physician to these pupils of ours who have a diseased tendency that we can correct by sympathetic and watchful care. Healing, not punishment, is our watchword; and how beautifully they respond to it!

(c) *Pernicious Habits*

If carefully looked into there may be found for every habit, however pernicious, a physical cause, and our business is, if possible, to find the cause and remove it. If it is not possible to do this, there is always some means of arresting the habit so that it may not become progressively worse; and there is every reason to feel that it may gradually decrease with proper training. We have a case of a little girl whose habit of self-abuse has been much improved and who evidently has had great physical relief from simply having the parts irrigated every day and thoroughly cleansed with an antiseptic solution. With boys we must resort to circumcision, as well as to thorough cleansing of all parts and to plenty of out-door exercise. All of this is general. As before stated in connection with other topics, everything depends upon the special individual case.

(a) *Bathing*

In reference to this matter we probably have somewhat different opinions from those of the managers of other schools of a similar kind. We take into consideration the fact that, notwithstanding their apparent good health, these children are mostly of a low vitality. We are mindful also of the fact that there is some nerve or brain lesion when there is mental deficiency. Therefore, we do not approve of any exercise that would tend to reduce this vitality or unduly waste nervous energy. We think that ordinarily every healthy child in our school should have a sponge bath between blankets each morning. The water should be tepid, and after the bath there should be a brisk rubbing with a flesh brush. In some cases a massage with salt brine should be given, and in others a rubbing down with oil. I would not advise giving a tub bath more frequently than two or three times a week, except in rare cases. Under special direction of a physician, the shower bath should be given to those whose condition calls for that kind of treatment. For certain forms of heart trouble, there should be medical baths. Some of our children are benefited by a quiet, soothing oil rub at night. In this, as in all other matters, the individual case is studied, and that kind of bathing or rubbing is used which produces the best results.

(b) *Clothing*

The clothing should, of course, be regulated by the weather. It must not be too warm in the house; but there should be plenty of good easy wraps for out-door exercise. A daily regular routine for in-door employment and out-door exercise should be arranged for each special case, and the clothing (adapted to the situation and the weather) carefully superintended.

(c) *Diet*

Rich pastries, too many sweets, pork, fried foods and, of course, tea and coffee should be excluded from the diet. There should be certain hours for meals, and nothing should be given between those hours. For instance, we would recommend this daily programme: 6.30 A. M., a glass of new milk; at 7.15, a wholesome breakfast; at 10.30, fruit and a good drink of water; at 1 P. M., dinner; at 5.30, supper; and for some children a glass of milk on retiring. Children of specially delicate health should perhaps receive certain kinds of nourishing foods every three hours. The articles selected for these children should be such as will build up the tissues, nerve cells, etc., and enrich the blood.

PHYSICAL TRAINING

The kinds of physical training are many and varied. So important is it that the individual needs shall be borne in mind, that it would be impossible, and I might almost say criminal, to prescribe any set of exercises for a patient, without first making sure of a correct diagnosis of the case. The physical training should be such as to develop and strengthen the powers and bring them into co-ordination; such as would lead to normal heart action, promote digestion and do away with constipation. Certain specific head movements may be serviceable in correcting head troubles. Each child should receive special individual attention and have the constant personal supervision of a skilled teacher. In our school gymnasium we utilize many special devices for individual cases.

ATTENTION TO OBVIOUS PHYSICAL DEFECTS

Circumcision is frequently necessary. There should be an examination of the eyes as to the need of glasses; examination of the nose and throat as to enlarged tonsils, adenoid growths, etc. There may be need for the reduction

of glands, and in some cases of little girls treatment of genital conditions.

SCHOOL AND CLASS WORK

The school work is, of course, largely objective. We have small classes, and our specially-trained teachers employ every device first to secure attention, then interest, and finally to open a channel for graded instruction. This requires the greatest tact, persistence and skill. Any object which arouses interest, even though it may be only a destructive interest in bad cases, may be utilized as the first step in the mental training. We can determine how to proceed with the schooling only after we have learned the capacity of the particular child. Many details of care and management not possible to specify here are needful for each individual child after securing a correct diagnosis. It is necessary to obtain a methodical history of the child from the time of birth, including pre-natal accidents and influences, if possible, down to the present moment. Such a record should also give an account of diseases, if any, which have prevailed in either branch of the family, such as gout, rheumatism, diabetes, Bright's disease, tuberculosis, nervous disease or insanity. If the trouble is attributed to an accident, the nature and effect of this should be investigated in detail.

VIII

PRESIDENTIAL ADDRESS*

THE physical health of the people of the world we conceive to be in the hands of enlightened and conscientious physicians. The physician can, by study, by scientific training, by interchange of ideas with others similarly interested, by advocating wise legislation, safeguard the sanitary interests of the community, the state, the nation; in just the same way the teachers of our land may stand as a great bulwark of strength and protection between the American people and threatening dangers resulting from inherited mental and moral weakness and disease. Just in proportion as they realize the importance of their mission and are suitably equipped for carrying it out, just in that proportion will the number of really efficient men and women increase, and the number of the inefficient, the incapable, correspondingly decrease. For long years the problems that face the teachers of normal children have been met and discussed, with varying degrees of intelligence, and valuable additions have been made to the educational principles that obtain in our schools and colleges to-day. It was reserved for comparatively recent times to direct attention to subnormal types of intellect, and to formulate principles adapted to the much more complex and difficult task of developing the powers latent in the intellectual and moral constitution of a relatively small, but numerically large, class of persons who come into the world

* Read before the Department of Special Education of the National Educational Association, at Asbury Park, N. J., July 5th, 1905. See Proceedings of the N. E. A. 1905, p. 883.

handicapped by mental and moral deficiency. Moreover, as the importance of preventive measures is yearly becoming more fully realized in the medical profession, so in the educational field it is being more clearly apprehended that the general dissemination of certain fundamental principles will lead to a constantly diminishing number of children of defective mentality. The future parents of our nation need to know the cause and prevention of mental weakness and disease—a matter of even more vital importance in striking at the root of the evil than any or all of the curative agencies that devoted men and women have spent their lives in bringing to full efficiency in dealing with those who have already come into the world with this terrible handicap in the race of life.

As a result of my own experience and observation, I have ventured to offer a few suggestions that it may be well to consider. In the first place, to secure the best results from the work in which we are specially interested, we should introduce and maintain as far as possible, strictly scientific methods. "Scientific thought," says Clifford, "is not an accompaniment or an addition to human progress; it is human progress itself." In pedagogy, as in any other science, we must ascertain our facts by the most careful observation, then correlate and classify them. By so doing we shall secure a fund of knowledge which we can turn as a searchlight, if I may so express myself, upon many of the difficult problems of the day. Surely in no branch of the educational work of our country has there been so great progress during the last five years as in that of the department of special education. We have passed the stage in our history when teachers of normal children, and indeed people in general, looked upon us as engaged in inferior educational work. Even the great universities are now willing to acknowledge that they have much to learn from us, and their departments of psychology look to us for data to help them in solving some of their most interesting

problems. Moreover, as a result of just such national meetings as that which now calls us together, the world at large more fully appreciates the necessity of the efficient mental and moral training of the youth of the present generation who will be the parents of the next, in order to prevent their offspring from entering the world with the heavy handicap of some physical or mental deficiency. The time is near at hand when our aims and, let us hope, our achievements will be seen in their true light, as of vital importance to the well-being of the human race.

As a result of years of experience, I am convinced that no teacher should be entrusted with the care of subnormal children who has not had some years of experience in classes of children of the usually healthy mental type, and that such teachers shall have shown special powers of adaptability, insight, and sympathy, such as are constantly called for in dealing with the class of children in whom we are especially interested. Not inferior ability, not even average ability, but the *very best*, should be sought out to do the specially difficult work in our schools. In this connection I wish to indorse with great heartiness an idea for which Miss Campbell, of the University of Chicago, is responsible. Success in teaching children in our schools for the subnormal should receive the same recognition from the state in the way of testimonials for efficient work as is given to those who have taught successfully in the regular schools. This will encourage first-class teachers to seek positions in the schools in which we are interested; moreover, this is a matter of simple justice, and we must work for its accomplishment.

Another idea which I think should recommend itself to the fair-minded is that state institutions should be provided primarily for the indigent who at the same time are physically or mentally deficient. There are in the United States to-day thousands of feeble-minded children, not to speak of the deaf and the blind, for whom the heads of state

institutions refuse to make provision on the plea of lack of room. Yet in these same institutions pay pupils are received for amounts ranging from \$500 to \$800 per year. It would be far better, it seems to me, to provide for the indigent first, and divert such pay pupils to the small private homes where they could get that individual care and attention which will always and inevitably give such home schools an advantage over any public institution, where "herding" cannot be prevented, with all its attendant evils. In these smaller schools the work is of a character for which women are peculiarly fitted, and there will always be a sufficient number of capable women to undertake such training, if only there be a reasonable assurance of ability to finance the schools.

Another fact needs to be impressed on the public mind, especially on the wealthy who are disposed to be philanthropic; there is a strong need of endowed schools; there is, perhaps, an even greater need of endowments for the support of investigators in both the private and public institutions—investigators who shall study the patients from the standpoint of psychology and medicine, and from the data thus collected secure knowledge for the guidance of future generations. We have reason to believe that, with increasing knowledge among the masses of our people, there will be a marked decrease in the number of children born into the world with the handicap of physical and mental deficiency. Our private and public institutions for the deaf, the blind, and the mentally deficient must work hand in hand; and money could not be better spent than in scientific research along these lines. The usual method of disseminating information in printed form might well be supplemented by stated public meetings at which those with expert knowledge could set forth, in the simplest and least technical language, information essential to those preparing for the duties of parentage. By such means we may hasten the time when the bitterness and broken hearts consequent

on the advent of afflicted children shall be rare, if not wholly a thing of the unenlightened past.

Without undervaluing the work of our fellow-laborers all over the land in schools for normal children, we feel that we can magnify our own office; for are we not daily called upon to walk in the footsteps of Him who came into the world "to heal the broken-hearted, to preach deliverance to the captives, and the recovering of sight to the blind"—captives to ignorance and incapacity, blind to the beauties, the mysteries, the glories of nature and art, shut out from the rich realms to which their happier brothers and sisters have free and easy access? Every wise word you can utter, my friends, every plea you can advance in behalf of these afflicted children of our common Father, will be in the nature of a second evangel. May all that we say and do be prompted by a spirit of clear and reverent appreciation of the seriousness and importance of the work in which we are engaged.

IX

THE CHILD WHO HEARS, YET CANNOT TALK*

TWO weeks ago to-day I opened a discussion at the Women's Medical Association in Philadelphia, on a paper entitled "The Child." The thought that I desired to establish in the minds of those who honored me by their attention was that, no matter how broken or deformed the body of a human being may be, within that body is a personality, and it is our business to liberate this personality from its prison—to remove the obstructions that prevent the assertion or expression of the individuality.

In reference to the development of speech in the deficient child, my basic thought is, that we must arouse the personality of the child and stimulate whatever imperfect power may be found, thus aiding the personality in finding its way out into the world of motion and sense, of which it should form a part. It will be my endeavor, first, to make plain to parents and teachers the process by which a normal child, or a child with a so-called normal body, is able to make its thoughts known through speech; secondly, how the teachers of deficient children endeavor to find out what may keep the personality of such children hedged in. If examination reveals broken nerve fibres, or the absence of certain nervous structures, it will be our place so to deal with the personality of the deficient child as to enable it to utilize for itself other outlets through which we may know what its thoughts are.

* Read at the meeting of the American Association for the Study of the Feeble-Minded, Waverly, Mass., June 6th, 1907.

If there is one physical power which may serve as a standard by which man can be truly measured, a power which places him above the dumb animal—it is the faculty of speech. The immeasurable distance between man and every other animal on earth is fully accounted for by the existence, the nature and the significance of mind-words. Regardless of the physical study, the faculty of speech consists less in uttering words than in the power of making words. Therefore, the faculty of speech is primarily the capacity for making words, and words can come only from personality, or mind, or the *ego*, or whatever you may call it. Apart from personality, the power of speech has no existence. Words are the outgrowth of a meaning, just as a knife was first made by some one who wanted to cut. Words grow old and die. Some of the finest languages ever spoken are now dead. Therefore, it is not words that concern us, but the capacity for making them, and this is the faculty of speech itself. No speechless race of men has yet been found. Not the least impressive fact about this exclusively human faculty is its limitless power of creation. It would take too long to show all that the philologist has learned about speech; but the more we read and understand the more convinced we must be that the source of all words is a conscious mind, the personality itself. The mind's activity comes first, and is the beginning and cause of the word. We need to emphasize this primary truth lest it escapes us: those mental energies originate the words which are perceived objectively on the one hand, or are transmuted into motor impulses on the other, in brain areas upon which we may place our index fingers. Otherwise, we might infer that these material localities, these speech areas of gray matter, do themselves originate the words which are located there. We shall find instead that the material centres for words in the brain substance no more make those words than the shelves of a library make the books arranged on them. The ultimate fact is rather, as

revealed by the physiological study of the faculty of speech, that words are the instruments which the thinker invents or makes for himself for the purpose of defining his thought.

As to the words themselves, we now want to know the relation of words to the physical brain, and it is to our physicians that we owe the discovery of the localization of the brain areas of speech. Through physiologic experimentation and clinico-pathologic studies, physicians have been enabled to determine the various brain centres and nervous pathways of the speech mechanism. From their discoveries we have learned that the nervous mechanism of speech is two-sided—namely, sensory and motor. Words come to us through the ear and locate themselves in what is called the first temporal convolution, which is in the cortical area of hearing. Here the verbal memories are said to be arranged, figuratively, much like the shelves of a library. Then we have words which come to us through the eyes in reading. They come to their special locality, which is called the angular gyrus, and this is in the cortical visual area. Sound words and sight words are thus registered in different parts of the brain. Then, too, we find another word register for the sense of touch. The blind are enabled to read in this way.

The motor side of the speech mechanism is concerned either in vocal utterance or in writing. This is styled propositional speech, because propositions or ideas are transmuted into motor impulses. We require a different mechanism for this, because it introduces muscular movement; we therefore call it motor speech; this is located in a different place in the brain cortex, in the place where muscular movements are initiated, near the regions which govern the movements of the tongue and other organs of articulation and close to the areas which govern the hands. The propositional speech centre is found in Broca's region, a cortical area no larger than a hazel nut and located on the left side of the brain, in right-handed persons, and on the right

side in left-handed persons. This area of the brain was named after a French surgeon who first identified its connection with speech. The sensory speech areas (for the perception of spoken or written words, etc.) are, as has been said, like the shelves of a library. They are there waiting to register the words, and when we take up different languages we must put in new shelves. It has been positively proved that a man who was conversant with English, French, Latin and Greek, was through word blindness able to read only a very few words in English; then he tried French, and he could do somewhat better in that tongue, then he tried Latin and did still better, and when he took up his Greek he was fluent, showing that the part where his English words were registered was almost destroyed, and the part where his Greek was registered was intact. This is a revelation of what we can do ourselves.

It should be noted that no part of the human brain has any original or native connection with the gift of speech; this great faculty is always acquired—no one was ever born with this power. Man has the various convolutions in pairs in both hemispheres, and yet man uses only one of the two centres of speech. If in early life the cells of the left hemisphere have been injured, then the child uses those of the right, and they become the seat for speech. In most people the entire word mechanism, in all parts, is found only in one of the two hemispheres, while the other hemisphere remains wordless throughout life. The active centres are usually located in the left hemisphere. Thus, part of the left superior temporal convolution hears words; part of the left angular gyrus perceives words; and in Broca's region, ideas are changed into motor impulses that pass to the tongue, lips, larynx and other portions of the voice mechanism. There is also a centre for writing in the motor region of the brain.

Now, the left side of the brain, originally, was exactly like the right side, but people took to using the right hand,

and this has developed the left side of the brain. In the relations of men, one personality longing to communicate with another uses his hands in making gestures. Gesture was, therefore, the first form of language. If we look at the centres we shall see that the area governing the movement of the hand in the motor region of the brain is very near the centre which presides over the movements of the face, of the lips and of the tongue. We can thus see how readily facial expression, allied to gestures, in attempts to communicate, will produce sounds from the lips and tongue, and they will become words. And as the right hand is more often used to make gestures, the centres have been located in the left brain.

Now, there is one fact to remember; that is, the plasticity of the matter of the brain cortex; in other words, its capability of education, its educability; thus the personality can modify the brain. Hence, a strong personality may be able to make a good brain out of a poor one, but a perfectly formed brain will not make a strong personality out of a weak personality.

I want to say just here that neither you nor I can say what kind of personality is in the mentally deficient child until we open the doors of the prison house. I also want teachers to understand how much is involved in producing speech in a hearing child who does not talk. And, briefly, I want to say something of the work of the central nervous system. But we must consider how we are going to fill these shelves with books; that is, with words; this is done in a normal child through the central nervous system.

We have now considered how the personality may impress the cortex of the brain and establish the centres of speech, or, as we have termed them, the shelves in which we place the different books, as it were; but we have not yet considered what was involved, in a physiological sense, in getting these books on the shelves.

The interior of the brain is a mass of connecting nerve

fibres of three kinds, projection, commissural and association fibres. The projection fibres are projecting, so to speak, upon the cortex of the brain, and convey sensory impulses from the special sense organs. There are also motor projection fibres which project the stimuli from certain motor areas upon the cells in the spinal cord, and thence indirectly upon the muscles. The commissural fibres are those which join like parts of the two hemispheres and enable these parts to work in unison. We now come to the third class, association fibres, the most important for the psychologist. These fibres connect different convolutions in the same hemispheres. If anything should injure these fibres, perception, memory and thought might be impossible. In other words, these association fibres take the different sensations and make them into one whole sensation. The optic nerves pour their stimuli into cells in one part of the brain; the auditory, tactile, gustatory nerves to still other parts, and it is the function of the association fibres to fuse, as it were, these various stimuli into a single concept. These important fibres furnish the physical basis of association.

One can readily see from this how the whole nervous system is a network of nerve currents coming in and going out, on sensory and motor nerves, and how all these nerves connect in different ways to aid the personality in sending its messages and giving its thoughts out to the different parts of the speech centre, and how the association fibres work to fuse the different parts into a whole. It is one of the most beautiful pieces of mechanism any one can possibly imagine.

In other words, we have what we call the afferent nerve, which sends a current to a centre, and the efferent nerve, which transmits from the centre some nervous vibration. All these nerve centres are connected by short nerve fibres. Now, one important principle to bear in mind is that the afferent segment of the nervous system, or that

which transmits stimuli from the outside world, is the ultimate fashioner of the nervous system habit, and not the central system itself nor the efferent segment.

From this brief survey of the mental mechanism, parents and teachers can see the necessity of knowing that there may be a thousand breaks in the mechanism of the hearing child which may prevent a personality from presenting its thoughts to the outward world in words. In the case of the deficient child, the disability is correspondingly greater.

When we view even briefly the wonderful mechanism of the central nervous system, and of the incoming, habit-forming stimuli along the afferent nerve fibres, and of the outgoing motor results, we are amazed at the intricacy of the agencies involved in speech. Can there be a greater work in any university or college than to build and engineer the delicate bridges and pathways by which you and I shall call forth the thoughts of the imprisoned personalities buried in the *debris* of broken nerve fibres, or powerless in expressing because of the absence of parts of the requisite physical structure?

But great as is the undertaking, it can be accomplished; we can, if we will study closely, find the keynote of every personality entrusted to our care. When we find this keynote, we must study the physical structure of the body and combine with this a knowledge of psychology. Then we shall be able to build our bridges, and not until then. With this knowledge we must have wisdom. The teacher who undertakes to call forth into intelligent activity the hidden personality must have a fullness of information far beyond the ordinary knowledge of the principles of articulation. First must come the physical education of the body, a well-directed system of scientific manual training with co-ordinated sense training; and then the articulation work may bring response.

If you and I could impress the public with the scientific

truth that behind these broken structures may be marvelously interesting personalities, we should have no difficulty in establishing endowed schools, equipped with every scientific apparatus, under the most skilled engineers, to aid us in producing the artificial structure when the natural function is lacking, in order to bring out and develop in this sense-world of ours these hidden personalities. We cannot close with a better sentiment than that of Professor Huxley:

“After passion and prejudice have died away, the same result will attend the teachings of the naturalist respecting that great Alps and Andes of the living world—man. Our reverence for the nobility of manhood will not be lessened by the knowledge that man is in substance and in structure one with the brutes, for he alone possesses the marvelous endowment of intelligible and rational speech—thus he stands as on a mountain top, far above the level of his humble fellows, and transfigured from his lower nature, by reflecting here and there a ray from the infinite source of truth.”

This idea of personality or “power behind the throne” has been most ably expressed by Dr. W. Hanna Thomson in his book called “Brain and Personality.” Wherever his language has expressed the thought that I wished to convey, I have used it. Every idea of his is my own, and has been for years.

X

THE MIND OF THE SUBNORMAL CHILD AND ITS LIBERATION*

THE paper read at your last meeting dealt with the mind of the normal child. I wish to present to you to-night a study of the mind of the subnormal child and its liberation.

In one of his essays Bacon has said: "I had rather believe all the fables of the Legends and the Talmud and the Alcoran than that this universal frame is without a mind." To me this brief quotation contains in a nutshell the whole philosophy of mind. It expresses the keynote of my conclusions regarding the mind of the subnormal child.

Let me begin by making clear to you what I mean by the word *mind*. As it is commonly used, this word varies greatly in meaning. Webster's Dictionary tells us that mind is the understanding or intellect; that which judges and reasons; again, that it is the soul.

The earlier psychologists interpreted mind as consciousness and its capabilities, both acquired and innate; or, in other words, the functional activity of brain-tissue. But in recent years psychologists have been forced to admit that mind extends beyond the confines of consciousness. The term has therefore been extended to include those sub-conscious or transliminal phenomena which affect consciousness.

The philosopher goes further in his definition of mind. He uses the term in general as an antithesis to matter. He

* Read at a meeting of the Home and School Association, Swarthmore, Pa., January 4th, 1909.

calls mind in this sense that part of reality "which does not admit of exclusive interpretation in terms of matter and motion" (Baldwin).

The theologian's definition is even more all-embracing. Mind, as interpreted by him, includes not only the psychologic, but also the philosophic phases. But to him the latter is much more definite and concrete. He believes mind to include "the non-corporeal and spiritual individuality of man" (Baldwin). We might continue to present definitions, interpretations and viewpoints regarding mind sufficient to fill a volume. We must be content, however, with the four general views just mentioned: first, the common definition; second, the psychologic; third, the philosophic; and fourth, the theological definition.

For twenty-five years this problem has been one of absorbing interest to me. I have viewed it not only from the abstract and theoretical standpoint, but also, and more particularly, from the standpoint of practical effects and results in educational work. In its relation to the mind of the subnormal child, I have examined it perhaps more closely than any other investigator, and I feel that I have ample basis for my conclusions.

Now, what is the *real* child? Is it the physical body? No. Is it the psychologic mind—that complex of sensation, perception, association, memory and other related faculties? By no means. It is the higher plane, that portion of the individual which, according to our philosophic definition, "does not permit of exclusive interpretation in terms of matter and motion." This I believe to be the real child, and I call it the *personality*.

I do not mean by this that the personality is the *whole* child. The body and the psychologic faculties are necessary to complete the individual. I mean that the personality is the moving power, the molding and formative influence which determines what the individual shall be. It is, as it were, the *cause* which uses the body as a means to the

ends of life. Thus, it does not depend for its existence upon the physical body; nevertheless, without the latter its manifestation in the world of sense would be impossible.

The child's real worth should be measured—if this were possible—by the personality rather than by its external manifestation, for, as was said, the latter depends on the physical only, whereas the former depends chiefly upon the hereditary racial and family characteristics and the many modifications that ancestral environment has exerted upon them.

It is my conviction that mind is more than mere physiological function. I believe that we are bound to recognize an element which for the want of a better term I may call psychic. The theologian's definition thus comes nearer the truth than any other.

I would define mind as that portion of the individual being which is composed of the personality and the psychological faculties through which it is enabled to express itself in the external world—the faculties which are so often considered to be the whole of mind.

With this definition as a basis, let me point out to you the difference between the mind of the normal and of the subnormal child. The difference lies solely in the psychological faculties, which are dependent upon perfection of physical structure. These are but a small portion of the mind—really no more than the outward indications of its existence. In the higher mind—the child himself—the personality, there is *no difference*. In fact, the personality of the subnormal child may be much more wonderfully beautiful than that of many so-called normal children—but its beauty is hidden in a broken, maimed and imperfect body, which paralyzes its expression and prevents us from seeing its real possibilities.

The subnormal child is a child whose personality is imprisoned in its own brain-cells. Many of us fail to realize how dependent we are upon our physical selves.

If a bone is broken or a tendon cut, the part involved becomes functionless—we cannot use it. But does that cause a defect in our real selves? Are we any less whole in mind on that account? If a nerve-trunk to the eye, the ear or the larynx is severed, or if a brain-centre is isolated and left to degenerate by the pressure of a blood-clot, our power of outward expression is impaired or destroyed. But does that mean a defect in the personality? By no means. When we look at a helpless, mentally subnormal child, we should think, not of the broken nerve-pathways and imperfect senses, but of that which lies within and above them. How can we know what great things may be hidden there? Those who regard the physical body only, will say: "This child is an idiot, an imbecile; he is deficient." Let us cry shame that they, in their blindness, should use such terms. There are no idiots! There are no imbeciles! There are merely broken, crushed and imperfect little bodies, made so either by our ignorance or our carelessness, which perhaps imprison minds whose possibilities are much greater than our own.

You will doubtless wish to know upon what foundation this hypothesis of a personality within the physical body is based. I can answer only by referring again to that much-abused term "psychic." My reasons are not reasons that can be measured and demonstrated experimentally in the present state of our knowledge of the subject. We are not dealing with a measurable entity, but with one which, to quote again, "does not admit of exclusive interpretation in terms of matter and motion."

First, I believe it may be shown conclusively that what is termed "character," which no one will deny is a part of the mind, bears very little relation to the degree of physical or psychologic defect. I have seen many cases of children who were unable to utter a single intelligible word or to perform a single adequate act of self-help, but who showed in ways that could not be misunderstood force of character

far beyond many normal children. Some one may perhaps say this merely demonstrated that part of the central nervous system remained intact. But where, I ask, is the cortical centre of character, or of will, or of affection, or of zeal for right and justice? Every brain-centre in the normal child is involved in the expression of these, and when they show more than normal vigor in spite of an imperfect brain, I hold that nothing but a personality such as I have described can account for the facts.

One of the first things which called my attention to the possibility of the existence of a personality was a phenomenon which is more or less familiar to every one. I refer to the change which takes place in facial and bodily expression after death. We once had a little girl in our school who was a cretin. Her body was dwarfed and deformed, and her face appeared not to have a single line of beauty in it. And yet she showed a strong personality to those who knew her. The little girl died, and I was greatly surprised to note, a few hours after death, a remarkable change in her expression. All the deformity, every sign of pain, had disappeared, and her face was an almost perfect image of that of her sister, who was very beautiful. Perhaps you may think this impression due to sentiment, or to the relaxation of the tissues accompanying suspension of respiration and circulation, but I cannot believe that these would account for it, and I have seen it many times in widely varying cases. It is my opinion that death permits the true personality to go forth into outward expression, the defective functions of conscious life no longer interfering.

I have convinced myself, furthermore, that subnormal children possess psychic faculties which bear no relation to the type or degree of subnormality. I have in mind the case of a boy who was exceptionally defective. He was deaf, mute, partially blind, and so deformed as to be almost repulsive to a stranger. And yet wonderful things were

in that boy. I found that he had the faculty of reading my thoughts. Again and again I made the experiment of hiding something that he liked and then telling him to find it. At first he would sit perfectly quiet, but soon he would begin to look about, and it was seldom that he could not go directly to the spot and find the hidden article.

I have known many such cases. Some of them appeared to be cases of simple telepathy. In one instance, I awoke at two in the morning, with the feeling that one of my little girls needed me. The impression was so strong that I finally got up and went to her room. I found her sitting up in a very uncomfortable position. The attendant had fallen asleep and left her there. The child did not know enough to get up and go to her bed, and yet she was able to impress me with her need. Perhaps you will say that this was a coincidence, and if the case were an isolated one I might agree with you. But I have had countless similar experiences. In fact, if I am in need of rest and wish to get my mind entirely off my work, I am forced to go away to sleep. I cannot find any relation between these phenomena and the physical brain; and if they are not brain-functions, what are they? Again I must say, they are manifestations of personality.

Finally, let me say that my hypothesis *works*. It produces results. If I were convinced that a great treasure lay hidden in the earth, I would spare no effort to uncover it. But if I had no belief in its presence there, I would be foolish to waste time with a pick and spade. So it is with the personality of these children. Being convinced that it was there, I have sought by every means to draw it out, and I have succeeded many times when failure would have been inevitable had I doubted its existence.

With these convictions, you can understand why I feel that the tenderest care and most patient and thorough training are none too good for these children. It is their right.

And their helplessness makes the granting of this right a solemn duty.

The problem of educating the subnormal child is, as I have said, one of liberation. It becomes a question of reaching the personality by any means that will serve, through the physical body. Correction of the physical defects will be followed by development of the psychologic mind, and the personality will then find its way out into the world.

In this work much more than purely pedagogic knowledge is required. The educator alone cannot cope with the problems that arise. The psychologist and the physician must come to his aid. As the years have passed, I have learned more and more the truth of this, and it has forced me to acquire much of the more practical knowledge of both of these specialists.

Within the past eighteen months we have added to our staff of workers a physician who is also a psychologist, and he has been able to assist me much in the work. We cannot do all that we would, on account of lack of means, but we look forward to the time when an endowment will be given us which will enable us to enlarge our experimental laboratory and to establish a training school for teachers who may thus carry the work into other and wider fields.

I am going to ask our psychologist, Dr. E. A. Farrington, to tell you something about the methods we use in our school in accomplishing the results which we are so firmly convinced are possible in subnormal children—results the real value of which none of us can estimate. What these little ones that come to us with broken and imperfect bodies really are, we cannot tell. Their worth can be measured only after the physical body is laid aside and they stand erect in the Kingdom of Heaven, where "the first shall be last, and the last first."

XI

THE LEAKAGE IN OUR EDUCATIONAL SYSTEM*

DURING the last decade the great body of water flowing over the falls of Niagara has decreased so markedly as to threaten the integrity of this magnificent wonder of nature and to fill the hearts of those who love and reverence its beauty with fear lest it be entirely destroyed.

The eyes of a whole continent have been focused upon the Niagara river, and public indignation has forced an investigation that brought to light the exact extent and cause of this great leakage. Nor has popular sentiment rested here. The weight of public opinion has been brought to bear upon those whose lack of consideration for the public welfare has led them to turn the river water into their private turbine systems, and an effectual means will be found to stop the leak.

In the great onward flow of our educational stream a far more important leakage may be found than the one occurring in Niagara. This leakage is so extensive that the stream passing through the public schools is reduced to scarcely more than one-quarter its original volume, the lost material leaking out into the streets, the jails and the custodial schools, or else backing up and impeding the progress of the incoming stream.

An alarmingly large proportion of our children fail to complete even the small educational preparation for life

* Read at the 34th annual meeting of the American Academy of Medicine, Atlantic City, June 5th, 1909.

required by the state. Few of us are fully aware of these facts, and very few are even partially acquainted with the reasons for the condition and the causes underlying it.

The Russell Sage Foundation of New York City is now conducting a series of studies of public school children with a view to determining why children fail to advance in the grades. The statistical part of this investigation, which is in the hands of Mr. Leonard P. Ayres, has brought to light some surprising figures. He found in an examination of 20,000 children in fifteen schools of Manhattan, taking into account increase in population and loss by death after entering school, that for every 1,000 children in the first grade there were only 259 in the eighth grade, or about 511 less than there should be. Furthermore, he found 456 more children in the first grade than should be there if all advanced normally.

There are two closely related factors in this loss, namely, retardation, or dropping back, and elimination or dropping out. Mr. Ayres mentions several causes, three of which are important. They are late start, language difficulty and physical defects. His studies showed that late start is a small factor and that the language difficulty experienced by foreign children is unimportant. His examination of the records of physical defects brought to light the remarkable discovery that more defects occur in normal than in retarded children. Much might be said regarding this question of physical defects. The figures given by Mr. Ayres were unfortunately based upon rather meagre data, as there were comparatively few recorded physical examinations of the children studied. It is probable that a more careful and thorough examination of the retarded children would bring out many slight structural or functional abnormalities of the kind that are almost always overlooked in routine physical examinations made by the ordinary school physician. While slow progress in school is often attributed to physical defect, the blame is all too

commonly laid upon the mind of the child. Mothers and teachers will say: "Yes, Johnny is perfectly well, but he is so dull and inattentive that we can do nothing with him."

This brings to me what I believe to be the chief cause of the leakage in our educational system.

Plato says: "I maintain that ignorance is the ruin of states, and if this be true, legislators should seek to implant in them wisdom and banish ignorance."*

It is ignorance that overcrowds the lower grades of our schools; that populates our streets with delinquents; that fills our custodial schools; and that forces us to enlarge our county jails and state prisons. And where is this ignorance to be found? Among the children? Yes, perhaps. But we are sending them to school; why, then, do they not learn?

The answer is not hard to find. Teachers, parents, physicians, school superintendents, legislators — all must share the responsibility of this failure.

Parents are but rarely acquainted with even the simplest facts of parenthood, and are sadly ignorant of the significance of diet and hygiene in the care of their children. Teachers are but seldom informed as to the relation of eye, ear and throat defects to mental aptitude and of the vital part played by the nervous system in the growth of the body and the mind.

Professor Hugo Munsterberg, in his essay on Education,† deploras most justly the inefficiency of American teachers, and their lack of solid scholarship. He points out further how necessary is the co-operation of parents with the work of the school. "It is a noble thing," he writes, "that Americans put millions into new school-houses; but to build up the education in the classroom without a foundation in the serious, responsible aid of the parents is not better than to build those magnificent buildings of brick

* Dialogues of Plato: *Laws*, Book III.

† American Traits, p. 43.

and stone on shifting sand.”* Parents and teachers must work hand in hand. Ignorance of the elementary facts of life, growth and education on the part of either one may result in grave injury to the children.

Pedagogists who are in charge of our school systems are frequently not even informed as to the extent of retardation existing in their own districts, unless the facts and figures regarding it are brought before them by outside agencies; and legislators are either too ill-informed to deal with the question or too indifferent to give it their attention.

The medical profession must bear the responsibility of a great part of this ignorance. Parents should know something of anatomy and physiology, of hygiene and dietetics, and of the causes and results of common diseases. Teachers should be capable of recognizing physical abnormalities, of understanding their effect upon the child, and of applying such material, psychologic or pedagogic remedies as fall within their province. Who but our physicians can impart this knowledge? It is the medical adviser who is best suited to inform parents of the vital problems they are called upon to meet, and to instruct teachers so that they may co-operate efficiently with parents in making the home life and school life of the child equally effective. This duty should not be passively performed, but should take the place of an active educational campaign. And yet how many physicians not only fail to do this, but are actually lacking in the knowledge necessary to do it.

A serious, indeed a vital, error underlies the whole of this ignorance. It is the error of misconceiving and misunderstanding the real child nature. A child is not a machine; he is not a mere protoplasmic test-tube, within which numerous physical and chemical reactions are continually going on. He is a living thing, a human being, a body within which burns a spark of the Divine Fire. He has a personality, a soul. Perhaps you will call this un-

* *Ibid.*, p. 80.

scientific, imaginative, fantastic. But my conviction is profound that if the belief in personality within the physical body were firmly rooted in the minds of our physicians and other scientists—as in fact it is fast becoming rooted in the minds of our philosophers—and if this belief were imparted to parents, teachers and others concerned in the welfare of the child, a great change would take place in our educational system. We are in the habit of speaking of mentally defective children as if the real mind of the child were at fault. But in this we are placing the emphasis on the wrong side. The defect should be sought in the body, not in the mind; it will be found in the injured cortex, the undeveloped association fibres, the broken axis-cylinders, the blighted sensory organs, or the weak metabolic processes, and not in the higher faculties—those faculties which compose the personality. A viewpoint such as this would make it evident that there is something worth reaching within the shell of physical defects and moral obliquity, and this knowledge would act as a powerful incentive to better care and more persistent training. It would make us realize that nearly all retardation is due either to physical defect or to poor teaching.

We need organized and systematic instruction of parents by physicians. Thousands of children might be spared the handicap of defective bodies and untrained minds, the hardship of custodial life, or the disgrace of a prison sentence by such instruction.

We need really practical courses in physiology, psychology, hygiene, etc., conducted by able physicians, in the curricula of our normal schools.

We need experimental laboratories in connection with our public school systems, in charge of fully trained persons, competent to examine children who deviate from the normal work or progress of the regular grades, and to plan and execute efficient special methods of training to correct this deviation. We cannot expect results without

this. What can a teacher with a simple normal training accomplish, who is turned loose in a large room with thirty so-called backward children and merely told that she may have double time to teach them?

We need better taught and wider read physicians, who will not overlook deafness or adenoids, who will not make light of fever and convulsions, who will not fail to recognize microcephalus or thyroid defect, and who will not turn subnormal children out-doors to run wild, with the assurance that they will be "all right in a year or two."

Above all we need a more optimistic spirit, a more affirmative point of view in handling our exceptional children. There is too much of a tendency to pronounce difficult cases hopeless, and to pack them off to the custodial schools. This is little short of criminal. If a small part of the money that is spent in caring for these children were expended in devising suitable methods for training them, they would never need to be sent to an institution. This has been demonstrated repeatedly in our own school. I have in mind a microcephalic girl of mild type whose parents, believing her trouble incurable, kept her at home. All efforts to train her failed. She did not learn even a single letter of the alphabet. When she reached the age of fourteen years she was sent to us, and by utilizing methods devised especially to meet her needs, we were able in five years to teach her how to read, write, and attend to practically all the domestic and social duties that a girl of nineteen should perform. She is now capable of taking a place in her family. There are hundreds of such cases in our institutions at the present time who could have been spared custodial life if they had not been pronounced hopeless.

This wrong viewpoint is illustrated by an article published in one of the current popular magazines. The great good that this article might do is without doubt seriously handicapped by the fact that the writer discriminates

between backward children and those whom she is thoughtless and unkind enough to call "idiots" and "imbeciles." She believes that a look at the face will tell the psychologist that there is no mind to do anything with, and that the case is consequently hopelessly incurable. To any one who has studied children with the more serious forms of defect and has seen what wonderful improvement sometimes results in apparently difficult cases, this viewpoint is absurd. Articles of this kind undoubtedly cause much unnecessary pain and discouragement to many mothers.

If the influence of the American Academy of Medicine were exerted to arouse among physicians an active interest in the proper instruction of all who have in charge the care and upbringing of children, a movement could be started, the value and good effect of which can hardly be estimated. The people need to be taught the truth about these things, and the opportunity to give such instruction is in the hands of the medical profession. When adequate knowledge has been imparted, the work of stopping the leakage in our educational system will be an easy task, for enlightened public opinion is all-powerful.

